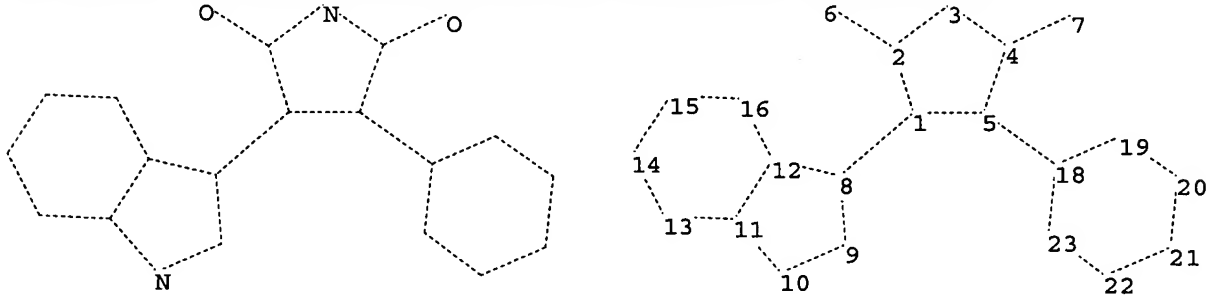
EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	206	(548/466).CCLS.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/02/27 10:09
L2	1207	(514/414).CCLS.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/02/27 10:09
L3	2	("6645970").PN.	US-PGPUB; USPAT; EPO; DERWENT	OR	OFF	2006/02/27 10:10

```
Connecting via Winsock to STN


Welcome to STN International!  Enter x:x

LOGINID:SSSPTA1600RXA

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1           Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2           "Ask CAS" for self-help around the clock
 NEWS  3  DEC 05   CASREACT(R) - Over 10 million reactions available
 NEWS  4  DEC 14   2006 MeSH terms loaded in MEDLINE/LMEDLINE
 NEWS  5  DEC 14   2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
 NEWS  6  DEC 14   CA/CAplus to be enhanced with updated IPC codes
 NEWS  7  DEC 21   IPC search and display fields enhanced in CA/CAplus with the
                   IPC reform
 NEWS  8  DEC 23   New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
                   USPAT2
 NEWS  9  JAN 13   IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
 NEWS 10  JAN 13   New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                   INPADOC
 NEWS 11  JAN 17   Pre-1988 INPI data added to MARPAT
 NEWS 12  JAN 17   IPC 8 in the WPI family of databases including WPIFV
 NEWS 13  JAN 30   Saved answer limit increased
 NEWS 14  JAN 31   Monthly current-awareness alert (SDI) frequency
                   added to TULSA
 NEWS 15  FEB 21   STN AnaVist, Version 1.1, lets you share your STN AnaVist
                   visualization results
 NEWS 16  FEB 22   Status of current WO (PCT) information on STN
 NEWS 17  FEB 22   The IPC thesaurus added to additional patent databases on STN
 NEWS 18  FEB 22   Updates in EPFULL; IPC 8 enhancements added

 NEWS EXPRESS  FEBRUARY 15 CURRENT VERSION FOR WINDOWS IS V8.01a,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
               V8.0 AND V8.01 USERS CAN OBTAIN THE UPGRADE TO V8.01a AT
               http://download.cas.org/express/v8.0-Discover/

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
  research.  Use for software development or design or implementation
  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 10:57:20 ON 27 FEB 2006
```

```
=> fil reg
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

FILE 'REGISTRY' ENTERED AT 10:57:31 ON 27 FEB 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   26 FEB 2006  HIGHEST RN 875270-69-2
DICTIONARY FILE UPDATES:  26 FEB 2006  HIGHEST RN 875270-69-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\QUERIES\10660442.str
```



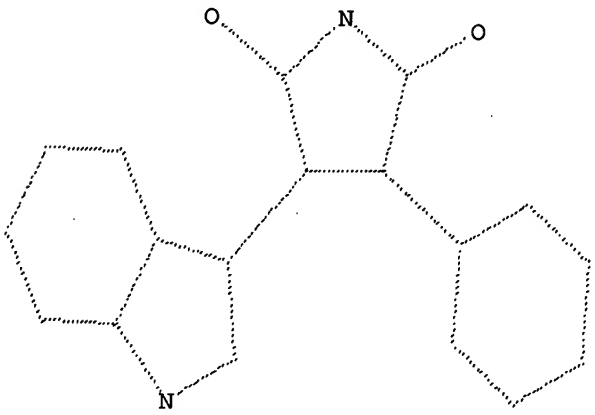

```
chain nodes :
6  7
ring nodes :
1  2  3  4  5  8  9  10  11  12  13  14  15  16  18  19  20  21  22  23
chain bonds :
1-8  2-6  4-7  5-18
ring bonds :
1-2  1-5  2-3  3-4  4-5  8-9  8-12  9-10  10-11  11-12  11-13  12-16  13-14  14-15
15-16  18-19  18-23  19-20  20-21  21-22  22-23
```

exact/norm bonds :
1-2 1-5 1-8 2-3 2-6 3-4 4-5 4-7 5-18 8-9 8-12 9-10 10-11 11-12 11-13
12-16 13-14 14-15 15-16 18-19 18-23 19-20 20-21 21-22 22-23
isolated ring systems :
containing 1 : 8 :

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:Atom 9:Atom 10:Atom
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 18:Atom 19:Atom 20:Atom
21:Atom 22:Atom 23:Atom

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 11:00:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 194 TO ITERATE

100.0% PROCESSED 194 ITERATIONS 29 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 3045 TO 4715
PROJECTED ANSWERS: 257 TO 903

L2 29 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 11:00:35 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 4178 TO ITERATE

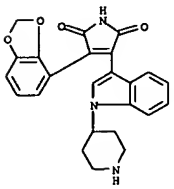
100.0% PROCESSED 4178 ITERATIONS 709 ANSWERS
SEARCH TIME: 00.00.01

L3 709 SEA SSS FUL L1

=> s l3 and caplus/lc

```
      49835185 CAPLUS/LC
L4          638 L3 AND CAPLUS/LC

=> s l3 not l4
L5           71 L3 NOT L4

=> d l5 1-71
```

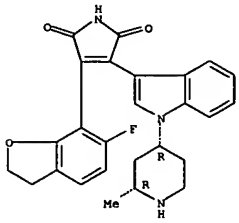
L5 ANSWER 1 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 793665-33-5 REGISTRY
ED Entered STN: 07 Dec 2004
CN 1H-Pyrrole-2,5-dione, 3-(1,3-benzodioxol-4-yl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H21 N3 O4
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

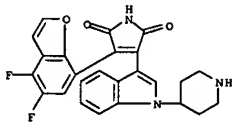
L5 ANSWER 2 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 792185-23-0 REGISTRY
ED Entered STN: 05 Dec 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-[(2R,4R)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-, rel- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H24 F N3 O3
CI COM
SR CA

Relative stereochemistry.



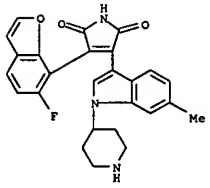
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 3 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 791583-98-7 REGISTRY
ED Entered STN: 02 Dec 2004
CN 1H-Pyrrole-2,5-dione, 3-(4,5-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H19 F2 N3 O3
CI COM
SR CA



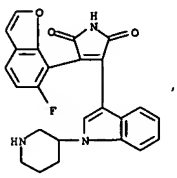
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 4 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 791060-25-8 REGISTRY
ED Entered STN: 01 Dec 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[6-methyl-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 F N3 O3
CI COM
SR CA



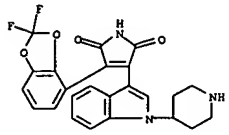
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 5 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 790656-70-1 REGISTRY
ED Entered STN: 30 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(3-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H20 F N3 O3
CI COM
SR CA

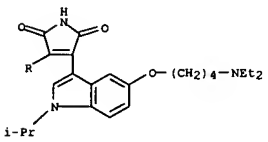


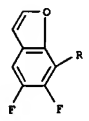
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 6 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 788820-02-0 REGISTRY
ED Entered STN: 26 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-(2,2-difluoro-1,3-benzodioxol-4-yl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H19 F2 N3 O4
CI COM
SR CA

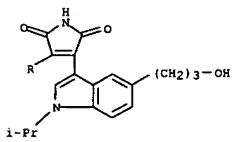


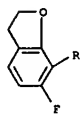
L5 ANSWER 7 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 788155-08-8 REGISTRY
ED Entered STN: 25 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-[5-[4-(diethylamino)butoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5,6-difluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C31 H33 F2 N3 O4
CI COM
SR CA





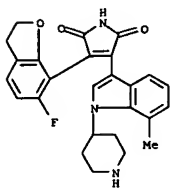
L5 ANSWER 8 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 787546-43-4 REGISTRY
ED Entered STN: 24 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[5-(3-hydroxypropyl)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H25 F N2 O4
CI COM
SR CA





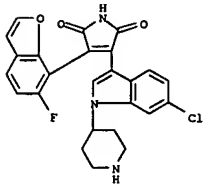
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 9 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 786639-55-2 REGISTRY
ED Entered STN: 23 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[7-methyl-
1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H24 F N3 O3
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

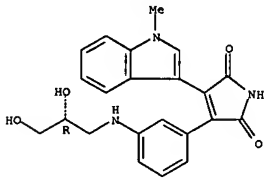
L5 ANSWER 10 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 785774-30-3 REGISTRY
ED Entered STN: 22 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-[6-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-
fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H19 Cl F N3 O3
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

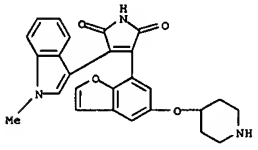
L5 ANSWER 11 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 785768-96-9 REGISTRY
ED Entered STN: 22 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(2R)-2,3-dihydroxypropyl]amino]phenyl]-4-(1-
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C22 H21 N3 O4
CI COM
SR CA

Absolute stereochemistry.



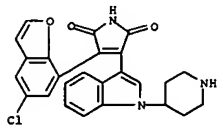
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 12 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 785046-11-9 REGISTRY
ED Entered STN: 21 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-(1-methyl-1H-indol-3-yl)-4-[5-(4-piperidinyloxy)-7-
benzofuranyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H23 N3 O4
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

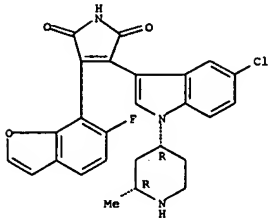
L5 ANSWER 13 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 784137-30-0 REGISTRY
ED Entered STN: 19 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-(5-chloro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-
indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H20 Cl N3 O3
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 14 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 783302-38-5 REGISTRY
ED Entered STN: 18 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-[(2R,4R)-2-methyl-4-piperidinyl]-1H-
indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, rel- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H21 Cl F N3 O3
CI COM
SR CA

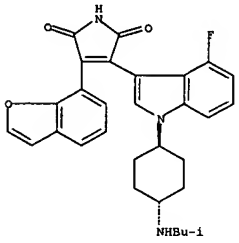
Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 15 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 782447-56-7 REGISTRY
ED Entered STN: 16 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-[trans-4-[(2-
methylpropyl)amino]cyclohexyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H30 F N3 O3
CI COM
SR CA

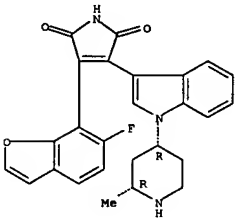
Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

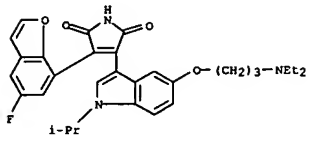
L5 ANSWER 16 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 781612-18-8 REGISTRY
ED Entered STN: 16 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-(6-fluoro-7-benzofuranyl)-4-[1-[(2R,4R)-2-methyl-4-
piperidinyl]-1H-indol-3-yl]-, rel- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H22 F N3 O3
CI COM
SR CA

Relative stereochemistry.



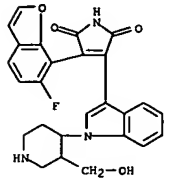
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 17 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 780035-96-3 REGISTRY
ED Entered STN: 14 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-[5-[3-(diethylamino)propoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H32 F N3 O4
CI COM
SR CA



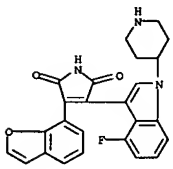
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 18 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 779322-87-1 REGISTRY
ED Entered STN: 12 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-(6-fluoro-7-benzofuranyl)-4-[1-[3-(hydroxymethyl)-4-piperidinyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 F N3 O4
CI COM
SR CA



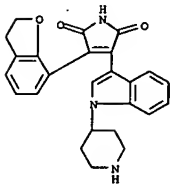
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 19 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 778573-35-6 REGISTRY
ED Entered STN: 11 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-(7-benzofuranyl)-4-[4-fluoro-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H20 F N3 O3
CI COM
SR CA



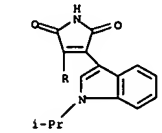
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

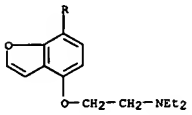
L5 ANSWER 20 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 777851-60-2 REGISTRY
ED Entered STN: 10 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-(2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H23 N3 O3
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

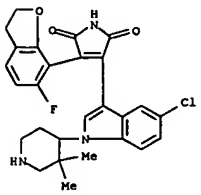
L5 ANSWER 21 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 776292-36-5 REGISTRY
ED Entered STN: 08 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-[4-[2-(diethylamino)ethoxy]-7-benzofuranyl]-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H31 N3 O4
CI COM
SR CA





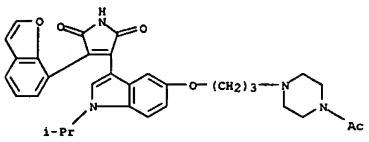
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 22 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 775577-07-6 REGISTRY
ED Entered STN: 07 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H25 Cl F N3 O3
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

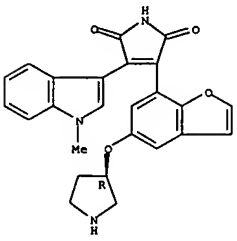
L5 ANSWER 23 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 775282-73-0 REGISTRY
ED Entered STN: 05 Nov 2004
CN Piperazine, 1-acetyl-4-[3-[[3-(4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1-(1-methylethyl)-1H-indol-5-yl]oxy]propyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C32 H34 N4 O5
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 24 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 774536-05-9 REGISTRY
ED Entered STN: 04 Nov 2004
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[5-[(3R)-3-pyrrolidinyloxy]-7-benzofuranyl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C25 H21 N3 O4
CI COM
SR CA

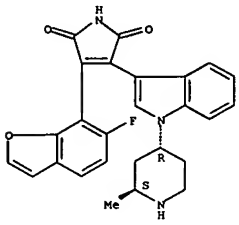
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

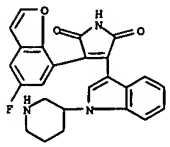
L5 ANSWER 25 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 773052-74-7 REGISTRY
ED Entered STN: 01 Nov 2004
CN 1H-Pyrrole-2,5-dione,
3-(6-fluoro-7-benzofuranyl)-4-[1-[(2R,4S)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-, rel- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H22 F N3 O3
CI COM
SR CA

Relative stereochemistry.



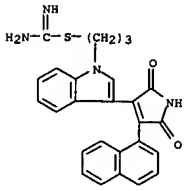
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 26 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 772336-96-6 REGISTRY
ED Entered STN: 31 Oct 2004
CN 1H-Pyrrole-2,5-dione,
3-(5-fluoro-7-benzofuranyl)-4-[1-(3-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H20 F N3 O3
CI COM
SR CA



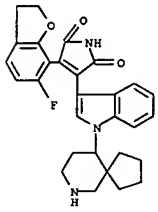
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 27 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 772314-22-4 REGISTRY
ED Entered STN: 29 Oct 2004
CN Carbamimidothioic acid,
3-[3-[2,5-dihydro-4-(1-naphthalenyl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]propyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 N4 O2 S
CI COM
SR CA



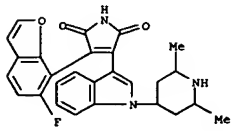
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 28 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 771473-49-5 REGISTRY
ED Entered STN: 28 Oct 2004
CN 1H-Pyrrole-2,5-dione,
3-[1-(7-azaspiro[4.5]dec-10-yl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
MF C29 H28 F N3 O3
CI COM
SR CA



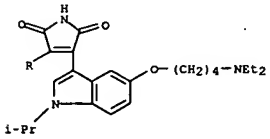
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

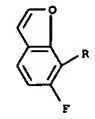
L5 ANSWER 29 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 770707-11-4 REGISTRY
ED Entered STN: 28 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-[1-(2,6-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H24 F N3 O3
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

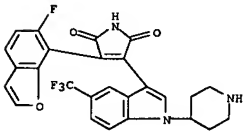
L5 ANSWER 30 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 769918-90-3 REGISTRY
ED Entered STN: 27 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-[5-[4-(diethylamino)butoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C31 H34 F N3 O4
CI COM
SR CA





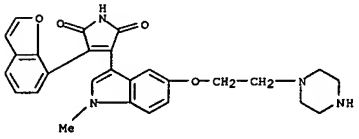
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 31 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 767627-34-9 REGISTRY
ED Entered STN: 24 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-5-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H19 F4 N3 O3
CI COM
SR CA



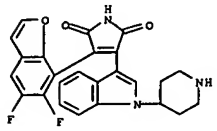
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 32 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 766506-12-1 REGISTRY
ED Entered STN: 21 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-methyl-5-[2-(1-piperazinyl)ethoxy]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H26 N4 O4
CI COM
SR CA



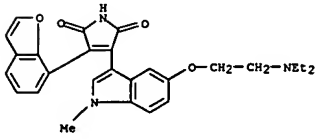
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 33 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 765897-46-9 REGISTRY
ED Entered STN: 20 Oct 2004
CN 1H-Pyrrole-2,5-dione,
3-(5,6-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-
1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H19 F2 N3 O3
CI COM
SR CA



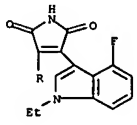
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

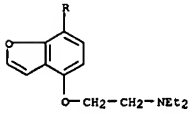
L5 ANSWER 34 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 764645-67-2 REGISTRY
ED Entered STN: 18 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-(diethylamino)ethoxy]-1-
methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H27 N3 O4
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

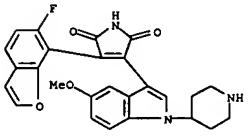
L5 ANSWER 35 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 763924-38-5 REGISTRY
ED Entered STN: 17 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-[4-[2-(diethylamino)ethoxy]-7-benzofuranyl]-4-(1-
ethyl-4-fluoro-1H-indol-3-yl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C28 H28 F N3 O4
CI COM
SR CA





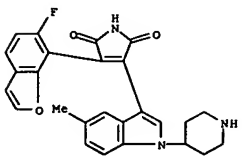
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 36 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 763081-08-9 REGISTRY
ED Entered STN: 15 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[5-methoxy-1-(4-
piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 F N3 O4
CI COM
SR CA



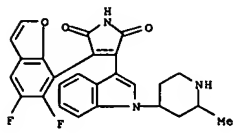
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 37 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 762238-11-9 REGISTRY
ED Entered STN: 14 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[5-methyl-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 F N3 O3
CI COM
SR CA

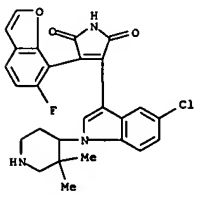


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 38 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 761398-62-3 REGISTRY
ED Entered STN: 13 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(5,6-difluoro-7-benzofuranyl)-4-[1-(2-methyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H21 F2 N3 O3
CI COM
SR CA

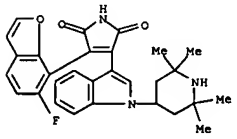


L5 ANSWER 39 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 760943-03-1 REGISTRY
ED Entered STN: 12 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H23 Cl F N3 O3
CI COM
SR CA



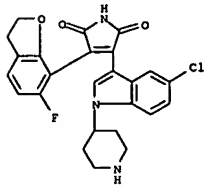
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 40 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 760171-32-2 REGISTRY
ED Entered STN: 11 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(2,2,6,6-tetramethyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H28 F N3 O3
CI COM
SR CA



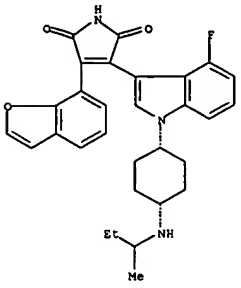
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 41 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 759455-70-4 REGISTRY
ED Entered STN: 10 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H21 Cl F N3 O3
CI COM
SR CA



L5 ANSWER 42 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 756815-95-9 REGISTRY
ED Entered STN: 05 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-[cis-4-[(1-methylpropyl)amino]cyclohexyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H30 F N3 O3
CI COM
SR CA

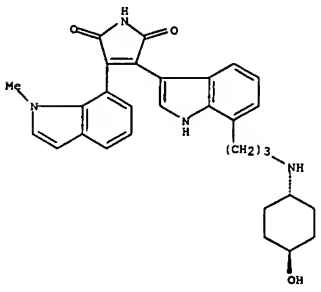
Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

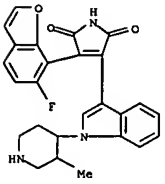
L5 ANSWER 43 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 756811-11-7 REGISTRY
ED Entered STN: 05 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-[7-[3-[[trans-4-hydroxycyclohexyl)amino]propyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H32 N4 O3
CI COM
SR CA

Relative stereochemistry.



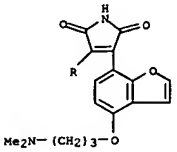
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

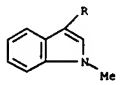
L5 ANSWER 44 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 755751-12-3 REGISTRY
ED Entered STN: 01 Oct 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(3-methyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 F N3 O3
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

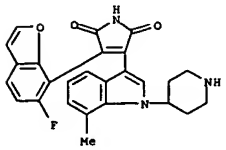
L5 ANSWER 45 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 754975-54-7 REGISTRY
ED Entered STN: 01 Oct 2004
CN 1H-Pyrrole-2,5-dione,
3-[4-[3-(dimethylamino)propoxy]-7-benzofuranyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H25 N3 O4
CI COM
SR CA



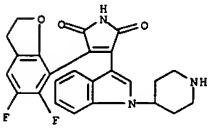


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 46 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 754183-57-8 REGISTRY
ED Entered STN: 30 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[7-methyl-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 F N3 O3
CI COM
SR CA



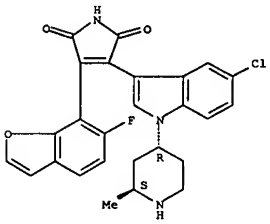
L5 ANSWER 47 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 752200-19-4 REGISTRY
ED Entered STN: 27 Sep 2004
CN 1H-Pyrrole-2,5-dione,
3-(5,6-difluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H21 F2 N3 O3
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

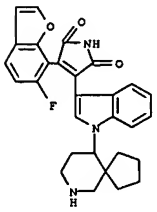
L5 ANSWER 48 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 750568-71-9 REGISTRY
ED Entered STN: 24 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-[(2R,4S)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, rel- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C26 H21 Cl F N3 O3
CI COM
SR CA

Relative stereochemistry.



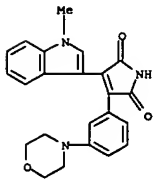
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 49 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 749205-95-6 REGISTRY
ED Entered STN: 22 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-[1-(7-azaspiro[4.5]dec-10-yl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
MF C29 H26 F N3 O3
CI COM
SR CA



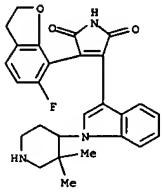
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 50 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 749200-67-7 REGISTRY
ED Entered STN: 22 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(4-morpholinyl)phenyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C23 H21 N3 O3
CI COM
SR CA



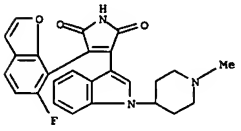
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 51 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 748130-13-4 REGISTRY
ED Entered STN: 20 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-[1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H26 F N3 O3
CI COM
SR CA



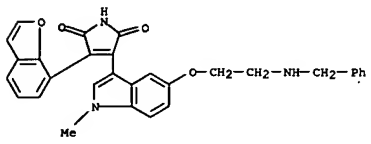
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 52 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 747407-76-7 REGISTRY
ED Entered STN: 19 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(1-methyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 F N3 O3
CI COM
SR CA



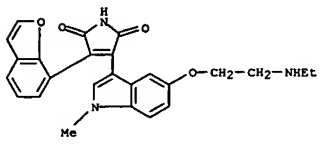
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 53 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 744195-13-9 REGISTRY
ED Entered STN: 14 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-methyl-5-[2-[(phenylmethyl)amino]ethoxy]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H25 N3 O4
CI COM
SR CA



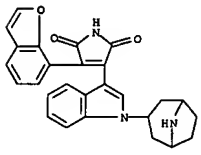
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 54 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 743417-58-5 REGISTRY
ED Entered STN: 13 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-(ethylamino)ethoxy]-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H23 N3 O4
CI COM
SR CA



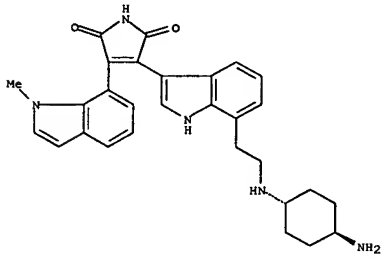
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 55 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 742693-19-2 REGISTRY
ED Entered STN: 12 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-endo)-8-azabicyclo[3.2.1]oct-3-yl-1H-indol-3-yl]-4-(7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C27 H23 N3 O3
CI COM
SR CA



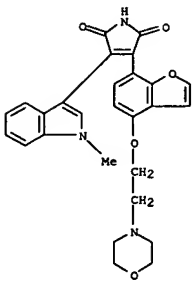
L5 ANSWER 56 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 742051-44-1 REGISTRY
ED Entered STN: 10 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(trans-4-aminocyclohexyl)amino]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H31 N5 O2
CI COM
SR CA

Relative stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

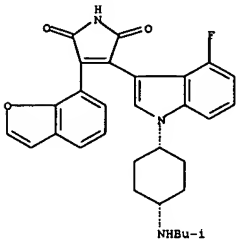
L5 ANSWER 57 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 741669-01-2 REGISTRY
ED Entered STN: 09 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[4-[2-(4-morpholinyl)ethoxy]-7-benzofuranyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H25 N3 O5
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

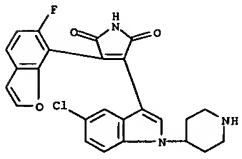
L5 ANSWER 58 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 741247-70-1 REGISTRY
ED Entered STN: 08 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-[cis-4-[(2-methylpropyl)amino]cyclohexyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C30 H30 F N3 O3
CI COM
SR CA

Relative stereochemistry.



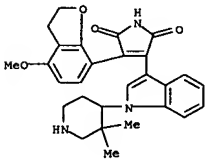
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 59 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 736925-23-8 REGISTRY
ED Entered STN: 01 Sep 2004
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H19 Cl F N3 O3
CI COM
SR CA



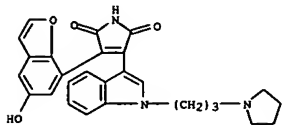
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 60 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 736133-12-3 REGISTRY
ED Entered STN: 31 Aug 2004
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-4-methoxy-7-benzofuranyl)-4-[1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C28 H29 N3 O4
CI COM
SR CA



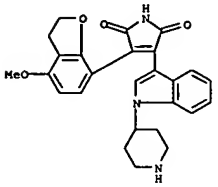
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 61 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 733736-87-3 REGISTRY
ED Entered STN: 27 Aug 2004
CN 1H-Pyrrole-2,5-dione, 3-(5-hydroxy-7-benzofuranyl)-4-[1-[3-(1-pyrrolidinyl)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H25 N3 O4
CI COM
SR CA



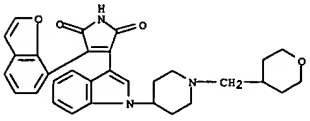
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 62 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 730936-53-5 REGISTRY
ED Entered STN: 22 Aug 2004
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-4-methoxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H25 N3 O4
CI COM
SR CA



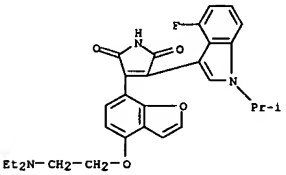
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 63 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 729557-73-7 REGISTRY
ED Entered STN: 21 Aug 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-[1-[(tetrahydro-2H-pyran-4-yl)methyl]-4-piperidinyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C31 H31 N3 O4
CI COM
SR CA



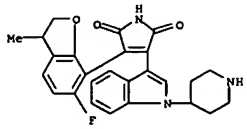
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 64 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 726125-30-0 REGISTRY
ED Entered STN: 12 Aug 2004
CN 1H-Pyrrole-2,5-dione, 3-[4-[2-(diethylamino)ethoxy]-7-benzofuranyl]-4-[4-fluoro-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C29 H30 F N3 O4
CI COM
SR CA



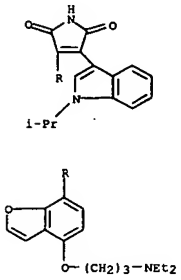
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 65 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 723241-84-7 REGISTRY
ED Entered STN: 05 Aug 2004
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-3-methyl-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H24 F N3 O3
CI COM
SR CA



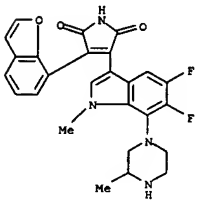
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 66 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 698345-94-7 REGISTRY
ED Entered STN: 23 Jun 2004
CN 1H-Pyrrole-2,5-dione, 3-[4-[3-(diethylamino)propoxy]-7-benzofuranyl]-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C30 H33 N3 O4
CI COM
SR CA



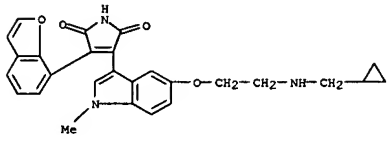
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 67 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 691847-94-6 REGISTRY
ED Entered STN: 11 Jun 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5,6-difluoro-1-methyl-7-(3-methyl-1-piperazinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C26 H22 F2 N4 O3
CI COM
SR CA



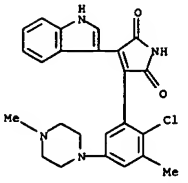
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 68 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 688000-27-3 REGISTRY
ED Entered STN: 31 May 2004
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-[(cyclopropylmethyl)amino]ethoxy]-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C27 H25 N3 O4
CI COM
SR CA



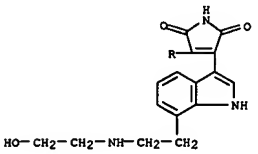
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

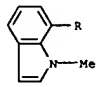
L5 ANSWER 69 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 611234-10-7 REGISTRY
ED Entered STN: 31 Oct 2003
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C24 H23 Cl N4 O2
CI COM
SR CA



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 70 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 408355-96-4 REGISTRY
ED Entered STN: 26 Apr 2002
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[[2-hydroxyethyl]amino]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C25 H24 N4 O3
CI COM
SR CA

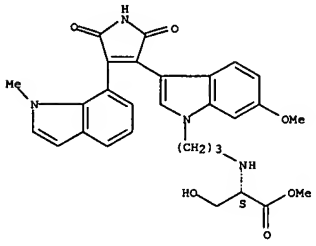




PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L5 ANSWER 71 OF 71 REGISTRY COPYRIGHT 2006 ACS on STN
RN 408355-80-6 REGISTRY
ED Entered STN: 26 Apr 2002
CN L-Serine, N-[3-[3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-6-methoxy-1H-indol-1-yl]propyl]-, methyl ester (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C29 H30 N4 O6
CI COM
SR CA

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

=> fil caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	308.80	309.01

FILE 'CAPLUS' ENTERED AT 11:01:17 ON 27 FEB 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 27 Feb 2006 VOL 144 ISS 10
FILE LAST UPDATED: 26 Feb 2006 (20060226/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

=> d his

L6 ANSWER 1 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2006:53816 CAPLUS
DOCUMENT NUMBER: 144:143032
TITLE: Modulation of glycogen synthase kinase-3β (GSK-3β) and method of treating proliferative disorders
INVENTOR(S): Yu, Qiang
PATENT ASSIGNEE(S): Agency for Science, Technology and Research, Singapore
SOURCE: PCT Int. Appl., 67 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006006939	A1	20060119	WO 2005-SG223	20050708

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

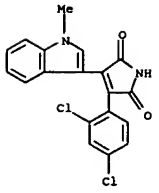
PRIORITY APPLN. INFO.: US 2004-586296P P 20040709

AB The invention provides methods and uses for promoting cell death, when combined with chemotherapeutic agents, in an abnormally proliferating cell, and for treating a proliferative disorder in a subject, which methods and uses involve contacting a cell with, or administering to a subject, an agent that modulates glycogen synthase kinase-3β activity to a cell that is being treated with a chemotherapeutic agent.

IT **280744-09-4**, SB-216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycogen synthase kinase-3β modulators in treatment of proliferative disorders)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 1 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L6 ANSWER 2 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1290025 CAPLUS
DOCUMENT NUMBER: 144:36329
TITLE: Thiazole compounds as PPAR modulators, their preparation, pharmaceutical compositions, and use in therapy
INVENTOR(S): Epple, Robert; Cow, Christopher; Xie, Yongping; Wang, Xing; Russo, Ross; Azimioara, Mihai; Saez, Enrique
PATENT ASSIGNEE(S): IRM LLC, Bermuda
SOURCE: PCT Int. Appl., 187 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005116000	A1	20051208	WO 2005-US18167	20050524

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-574137P P 20040524
US 2005-648985P P 20050131

OTHER SOURCE(S): MARPAT 144:36329
GI

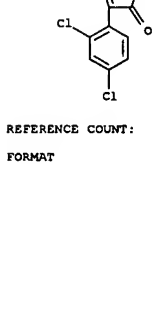
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to thiazole compds. of formula I, which are modulators of peroxisome proliferator-activated receptors (PPAR), particularly PPARδ. In compds. I, p is 0-3; L is selected from -XOX-, -XS(O)mX-, and -XS(O)mXO-, where m is 0-2 and X is a bond or (un)substituted C1-4 alkylene; R1 is selected from halo, C1-6 alkyl, C1-6 alkoxy, C1-6 hydroxyalkyl, C1-6 haloalkyl, C1-6 haloalkoxy, (un)substituted C6-10 aryl, (un)substituted C5-10 heteroaryl, (un)substituted C3-12 cycloalkyl, and (un)substituted C3-8 heterocyclyl; R2 is -XOXCO2R5 or -XCO2R5, where X is as defined previously and R5 is H or C1-6 alkyl; and R3 and R4 are independently selected from R6 and R6Y, where R6 is (un)substituted C3-12 cycloalkyl, (un)substituted C3-8 heterocyclyl, (un)substituted C6-10 aryl, and (un)substituted C5-13 heteroaryl, and Y is selected from C1-6 alkylene, C2-6 alkenylene, C2-6 alkynylene, -C(O)N(R5)-, and -OX-, where X and R5 are as defined previously, or R3 and R4, together with the atoms to which they are attached, form fused bi- or tricyclic C5-14 heteroaryl; including pharmaceutically acceptable salts, hydrates, solvates, isomers, and prodrugs thereof. The invention also relates to the preparation of I,

L6 ANSWER 2 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
pharmaceutical compns. comprising a therapeutically effective amt. of compd. I in combination with one or more pharmaceutically acceptable excipients, as well as to the use of the compns. to treat or prevent diseases or disorders assocd. with PPAR activity. Cyclocondensation of 2-bromo-4'-methoxyacetophenone with thioacetamide followed by bromination, demethylation, and alkylation with iso-Pr iodide gave bromothiazole II, which was brominated and substituted with phenol III (prepn. in 3 steps from 4-hydroxy-3-methylacetophenone given) to give thiazole IV. Compd. IV underwent Suzuki coupling with 4-(trifluoromethoxy)phenylboronic acid and ester hydrolysis to give thiazole V. Most preferred compds. of the invention express an EC50 value for PPARδ of less than 100 nM. The compds. of the invention are at least 100-fold selective for PPARδ over PPARγ.

IT **280744-09-4**, SB-216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of thiazole compds. as PPAR modulators and their use for treatment and prevention of diseases associated with PPARδ activity)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L6 ANSWER 3 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1289979 CAPLUS
DOCUMENT NUMBER: 144:36326
TITLE: Oxazole compounds as PPAR modulators, their preparation, pharmaceutical compositions, and use in therapy
INVENTOR(S): Epple, Robert; Xie, Yongping; Wang, Xing; Cow, Christopher; Russo, Ross
PATENT ASSIGNEE(S): IRM LLC, Bermuda
SOURCE: PCT Int. Appl., 75 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005116016	A1	20051208	WO 2005-US18166	20050524
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2004-574137P P 20040524
US 2005-649671P P 20050202

OTHER SOURCE(S): MARPAT 144:36326
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

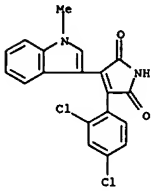
AB The invention relates to oxazole compds. of formula I, which are modulators of peroxisome proliferator-activated receptors (PPAR), particularly PPARδ. In compds. I, p is 0-3; L is selected from -XOX-, -XS(O)mX-, and -XS(O)mXO-, where m is 0-2 and X is a bond or (un)substituted C1-4 alkylene; R1 is selected from halo, C1-6 alkyl, C1-6 alkoxy, C1-6 hydroxyalkyl, C1-6 haloalkyl, C1-6 haloalkoxy, (un)substituted C6-10 aryl, (un)substituted C5-10 heteroaryl, (un)substituted C3-12 cycloalkyl, and (un)substituted C3-8 heterocyclyl; R2 is -XOXCO2R5 or -XCO2R5, where X is as defined previously and R5 is H or C1-6 alkyl; and R3 and R4 are independently selected from R6 and R6Y, where R6 is (un)substituted C3-12 cycloalkyl, (un)substituted C3-8 heterocyclyl, (un)substituted C6-10 aryl, and (un)substituted C5-13 heteroaryl, and Y is selected from C1-6 alkylene, C2-6 alkenylene, C2-6 alkynylene, -C(O)N(R5)-, and -OX-, where X and R5 are as defined previously, or R3 and R4, together with the atoms to which they are attached, form fused bi- or tricyclic C5-14 heteroaryl; including pharmaceutically acceptable salts, hydrates, solvates, isomers, and prodrugs thereof. The invention also relates to the preparation of I,

L6 ANSWER 3 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

pharmaceutical compns. comprising a therapeutically effective amt. of compd. I in combination with one or more pharmaceutically acceptable excipients, as well as to the use of the compns. to treat or prevent diseases or disorders assocd. with PPAR activity. Diazotization of 4-(trifluoromethoxy)acetophenone followed by heterocyclization with acetonitrile, and bromination gave bromooxazole II, which was brominated and substituted with phenol III (prepn. in 3 steps from 4-hydroxy-3-methylacetophenone given) to give oxazole IV. Compd. IV underwent Suzuki coupling with 2-isopropoxypyridin-5-ylboronic acid (prepn. from 2-chloro-5-bromopyridine given) and ester hydrolysis to give oxazole V. Most preferred compds. of the invention express an EC50 value for PPARδ of less than 100 nM. The compds. of the invention are at least 100-fold selective for PPARδ over PPARγ.

IT 280744-09-4, SB-216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of oxazoles as PPAR modulators and their use for treatment and
prevention of diseases associated with PPARδ activity)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L6 ANSWER 4 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1262399 CAPLUS
DOCUMENT NUMBER: 144:22712
TITLE: Triaryl compounds as PPAR modulators, their preparation, pharmaceutical compositions, and use in therapy
INVENTOR(S): Epple, Robert; Azimioara, Mihai
PATENT ASSIGNEE(S): Irm LLC, Bermuda
SOURCE: PCT Int. Appl., 59 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005113506	A1	20051201	WO 2005-US16747	20050513
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2004-571004P P 20040514

OTHER SOURCE(S): MARPAT 144:22712
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

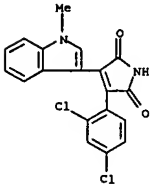
AB The invention relates to aryl compds. of formula I, which are modulators of peroxisome proliferator-activated receptors (PPAR), particularly PPARδ. In compds. I, m is 0-3; X, Y, and Z are independently selected from CH and N; L is (un)substituted (CH2)nO(CH2)n or (CH2)nS(O)p(CH2)n, where each n is independently selected from 0-4 and p is 0-2; R1 and R2 are independently selected from (un)substituted C3-12 cycloalkyl-A-, (un)substituted C3-8 heterocyclyl-A-, (un)substituted C6-10
aryl-A-, and (un)substituted C5-13 heteroaryl-A-, where A is a bond, C1-6 alkylene, C2-6 alkenylene, or C2-6 alkynylene; R3 is selected from halo, C1-6 alkyl, C1-6 alkoxy, C1-6 hydroxyalkyl, C1-6 haloalkyl, C1-6 haloalkoxy, (un)substituted C6-10 aryl, (un)substituted C5-10 heteroaryl, (un)substituted C3-12 cycloalkyl, and (un)substituted C3-8 heterocyclyl; and R4 is selected from (CH2)nO(CH2)nCO2R5 and (CH2)nCO2R5, where n is as defined previously and R5 is H or C1-6 alkyl; including pharmaceutically acceptable salts, hydrates, solvates, isomers, and prodrugs thereof. The invention also relates to the preparation of I, pharmaceutical compns. comprising a therapeutically effective amount of compound I in combination
with one or more pharmaceutically acceptable excipients, as well as to the

L6 ANSWER 4 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

use of the compns. to treat or prevent diseases or disorders assocd. with PPAR activity. Substitution of Me bromoacetate with 4-hydroxy-3-methylacetophenone followed by Baeyer-Villiger oxidn. and methanolysis gave phenoxyacetate II, which underwent substitution of 3,5-dibromobenzyl bromide to give dibromobenzyl ether III. Treatment of III with an excess of 4-trifluoromethylphenylboronic acid and ester hydrolysis resulted in the formation of terphenyl IV. Most preferred compds. of the invention express an EC50 value for PPARδ of less than 100 nM. The compds. of the invention are at least 100-fold selective for PPARδ over PPARγ.

IT 280744-09-4, SB-216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(preparation of triaryl compds. as PPAR modulators and their use for treatment and prevention of diseases associated with PPARδ activity)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:1259697 CAPLUS
DOCUMENT NUMBER: 144:22803
TITLE: Substituted pyrrole-2,5-diones as protein kinase C inhibitors, and their preparation, pharmaceutical compositions, and use as therapeutics, particularly as immunomodulators
INVENTOR(S): Van Eis, Maurice; Wagner, Juergen; Von Matt, Peter
PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005113545	A1	20051201	WO 2005-EP5183	20050512

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2004-10713 A 20040513

OTHER SOURCE(S): MARPAT 144:22803
GI

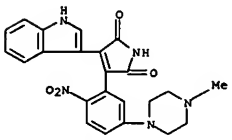
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I are disclosed, as well as processes for their production, their uses (in particular in transplantation), and pharmaceutical compns. containing them. Claims cover compds. I [wherein Ra is H, C1-4 alkyl, or C1-4 alkyl substituted by OH, NH2, NH-C1-4-alkyl or N-(C1-4alkyl)2; Rb is H, halo, C1-6 alkyl, or C1-6 alkoxy; each of R1 and R2, independently, is H or Me; R3 is F, Cl, acetamide, nitro, or amino; R4 is H, CH3, CF3, F, or Cl; R4 being other than H, CH3, or CF3 when R3 is Cl; or a salt thereof]. Fourteen specific compds. are claimed by name, and a slightly different list of 14 compds. are demonstrated in examples. Claims also cover the use of I and their salts and pharmaceutical compns. in the manufacture of medicaments for the treatment or prevention of diseases or disorders mediated by T lymphocytes and/or protein kinase C (PKC). Specifically claimed diseases include T-cell mediated acute or chronic inflammatory disorders, autoimmune diseases, graft rejection, cancer, and infectious diseases. Pharmaceutical agents containing I may also contain other active ingredients, including immunosuppressants, immunomodulators, antiinflammatories, chemotherapeutics, antiproliferatives, and antidiabetic agents. The prodn. of I by cyclocondensation of (1H-indol-3-yl)oxoacetic acid Me esters with corresponding 2-arylacetamides is also claimed. For instance, 4-bromonitrobenzene was coupled with ClCH2CO2Et using KOBu-tert in THF at -40° to give Et (5-bromo-2-nitrophenyl)acetate. Reaction of this bromide with 1-methylpiperazine at 65° (neat), followed by ammonolysis of the ester moiety with aq. 33% NH4OH at room temp., gave acetamide deriv. II. Cyclocondensation of II with Me (1H-indol-3-yl)oxoacetate in THF in the presence of KOBu-tert gave invention compd. III, isolated as the water-sol. acetate salt. III inhibited human recombinant PKCθ in vitro with an IC50 of 8.9 nM, and inhibited PKCα with an IC50 of 2.6 nM. III also had IC50 values of 25.5 nM in a CD28 costimulation assay, and 17.5 nM in a mixed lymphocyte reaction (MLR) assay. Increases in survival time were also obtained (no data) in a rat heart transplantation assay, using I at daily oral doses of 1-30 mg/kg b.i.d.

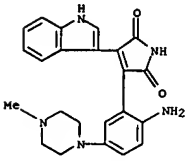
IT **870274-05-8P**, 3-(1H-Indol-3-yl)-4-[5-(4-methylpiperazin-1-yl)-2-nitrophenyl]pyrrole-2,5-dione **870274-06-9P**, 3-[2-Amino-5-(4-methylpiperazin-1-yl)phenyl]-4-(1H-indol-3-yl)pyrrole-2,5-dione **870274-07-0P**, N-[2-[4-(1H-Indol-3-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl]-4-(4-methylpiperazin-1-yl)phenyl]acetamide **870274-08-1P**, 3-(7-Methyl-1H-indol-3-yl)-4-[5-(4-methylpiperazin-1-yl)-2-nitrophenyl]pyrrole-2,5-dione **870274-09-2P**, 3-[2-Amino-5-(4-methylpiperazin-1-yl)phenyl]-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione **870274-10-5P**, N-[2-[4-(7-Methyl-1H-indol-3-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl]-4-(4-methylpiperazin-1-yl)phenyl]acetamide **870274-11-6P**, 3-[2-Fluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(1H-indol-3-yl)pyrrole-2,5-dione **870274-12-7P**, 3-[2-Fluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(1-methyl-1H-indol-3-yl)pyrrole-2,5-dione **870274-13-8P**, 3-[2-Fluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione **870274-14-9P**, 3-[2,4-Difluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(1H-indol-3-yl)pyrrole-2,5-dione **870274-15-0P**, 3-[2,4-Difluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(1-methyl-1H-indol-3-yl)pyrrole-2,5-dione **870274-16-1P**, 3-[2,4-Difluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(1,7-dimethyl-1H-indol-3-yl)pyrrole-2,5-dione **870274-17-2P**, 3-[4-Chloro-2-fluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(1H-indol-3-yl)pyrrole-2,5-dione **870274-18-3P**, 3-[4-Chloro-2-fluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione **870274-23-0P** **870274-24-1P** **870274-26-3P** **870274-29-6P**, 3-[2,4-Difluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione **870274-30-9P**, 3-[2-Chloro-4-fluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(1H-indol-3-yl)pyrrole-2,5-dione **870274-31-0P**, 3-[2-Chloro-4-fluoro-5-(4-methylpiperazin-1-yl)phenyl]-4-(7-methyl-1H-indol-3-yl)pyrrole-2,5-dione
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug candidate; preparation of pyrrolediones as protein kinase C inhibitors for use as immunomodulators)

RN 870274-05-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[5-(4-methyl-1-piperazinyl)-2-nitrophenyl]- (9CI) (CA INDEX NAME)

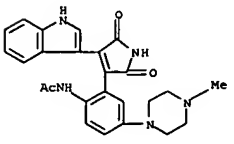
L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 870274-06-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-amino-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

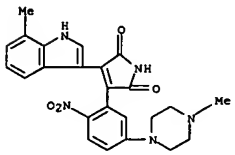


RN 870274-07-0 CAPLUS
CN Acetamide, N-[2-[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)

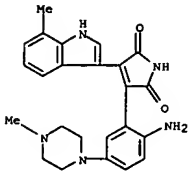


RN 870274-08-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-methyl-1H-indol-3-yl)-4-[5-(4-methyl-1-piperazinyl)-2-nitrophenyl]- (9CI) (CA INDEX NAME)

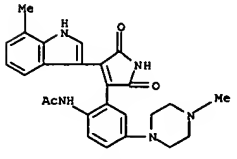
L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



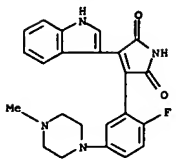
RN 870274-09-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-amino-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



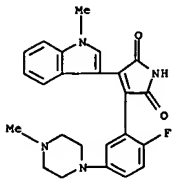
RN 870274-10-5 CAPLUS
CN Acetamide, N-[2-[2,5-dihydro-4-(7-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-4-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



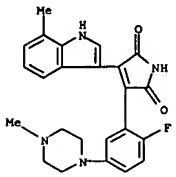
RN 870274-11-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



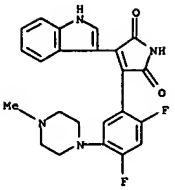
RN 870274-12-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



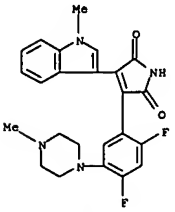
RN 870274-13-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



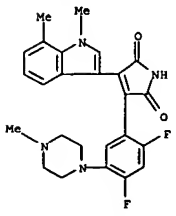
RN 870274-14-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2,4-difluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



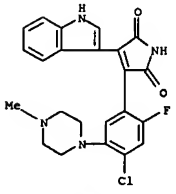
RN 870274-15-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2,4-difluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



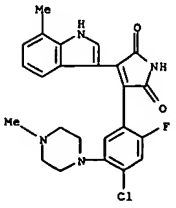
RN 870274-16-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2,4-difluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1,7-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 870274-17-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-chloro-2-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 870274-18-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-chloro-2-fluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

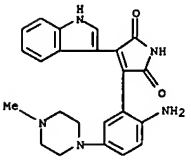


RN 870274-23-0 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-[2-amino-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 870274-06-9
CMF C23 H23 N5 O2



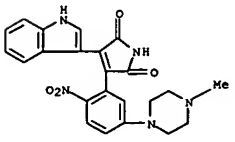
CM 2

CRN 64-19-7
CMF C2 H4 O2

RN 870274-24-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[5-(4-methyl-1-piperazinyl)-2-nitrophenyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 870274-05-8
CMF C23 H21 N5 O4



CM 2

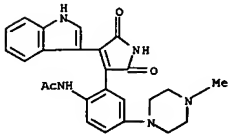
CRN 64-19-7

L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CMF C2 H4 O2

RN 870274-26-3 CAPLUS
CN Acetamide,
N-[2-[2,5-dihydro-4-(1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-4-
(4-methyl-1-piperazinyl)phenyl]-, acetate (9CI) (CA INDEX NAME)

CM 1

CRN 870274-07-0
CMF C25 H25 N5 O3

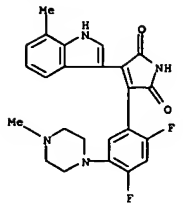


CM 2

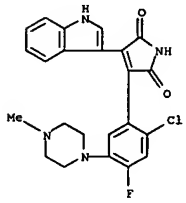
CRN 64-19-7
CMF C2 H4 O2

RN 870274-29-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2,4-difluoro-5-(4-methyl-1-piperazinyl)phenyl]-4-
(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

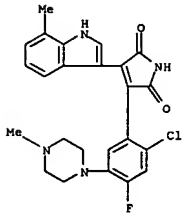
L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 870274-30-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-4-fluoro-5-(4-methyl-1-
piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 870274-31-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-4-fluoro-5-(4-methyl-1-
piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



L6 ANSWER 5 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 6 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1259663 CAPLUS
DOCUMENT NUMBER: 144:22911
TITLE: Isoxazole compounds as PPAR modulators, their preparation, pharmaceutical compositions, and use in therapy
INVENTOR(S): Epple, Robert; Russo, Ross; Azimioara, Mihai; Xie, Yongping
PATENT ASSIGNEE(S): IRM LLC, Bermuda
SOURCE: PCT Int. Appl., 79 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005113519	A1	20051201	WO 2005-US16672	20050512

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-571003P P 20040514

OTHER SOURCE(S): MARPAT 144:22911
GI

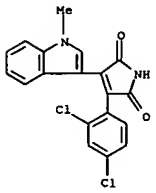
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to isoxazole compds. of formula I, which are modulators of peroxisome proliferator-activated receptors (PPAR), particularly PPARδ. In compds. I, R1 is selected from (un)substituted C1-6 alkyl, (un)substituted C3-12 cycloalkyl, (un)substituted C3-8 heterocyclyl, (un)substituted C6-10 aryl, and (un)substituted C5-10 heteroaryl; R2 is selected from (CH2)nO(CH2)nOR5, (CH2)nOR5, CO2R5, C(O)N(R4)2, C(O)N(R4)(CH2)nOR4, CO2(CH2)nOR5, C(O)(CH2)nOR5, C(O)N(R4)(CH2)nOR5, C(O)N(R4)(R5), and C(O)N(R4)(CH2)nR5, where n is 0-4, R4 is H or C1-6 alkyl, and R5 is C1-6 alkyl, C3-12 cycloalkyl, C3-8 heterocyclyl, C6-10 aryl, or C5-10 heteroaryl, or R4 and R5, together with the nitrogen atom to which they are attached, form C3-8 heterocyclyl or C5-10 heteroaryl; and R3 is selected from (un)substituted C3-12 cycloalkyl, (un)substituted C3-8 heterocyclyl, (un)substituted C6-10 aryl, and (un)substituted C5-10 heteroaryl; including pharmaceutically acceptable salts, hydrates, solvates, isomers, and prodrugs thereof. The invention also relates to the preparation of I, pharmaceutical compns. comprising a therapeutically effective amount of compound I in combination with one or more pharmaceutically acceptable excipients, as well as to the

L6 ANSWER 6 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
use of the compns. to treat or prevent diseases or disorders assocd. with PPAR activity. Esterification of 3-bromophenylacetic acid followed by coupling with cyanide, redn. of the nitrile to an aldehyde, condensation with hydroxylamine, and chlorination gave chlorooxime II. N-Boc-2-bromoethylamine was substituted with 2,4-dichlorophenol followed by deprotection, amidation with Et benzoylacetate to give benzoylacetamide III, which underwent cyclocondensation with chlorooxime II and ester hydrolysis, resulting in the formation of isoxazole IV. Most preferred compds. of the invention express an EC50 value for PPARδ of less than 100 nM. The compds. of the invention are at least 100-fold selective for PPARδ over PPARγ.

IT 280744-09-4, SB-216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(compds. and compns. as PPAR modulators and their use for treatment and prevention of diseases associated with activity of PPAR families, particularly PPARδ)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

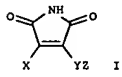
L6 ANSWER 7 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1220648 CAPLUS
DOCUMENT NUMBER: 143:454391
TITLE: Preparation of maleimide derivatives as plant growth regulators
INVENTOR(S): Bastiaans, Henricus M. M.; Donn, Guenter; Knittel, Nathalie; Martelletti, Arianna; Rees, Richard; Schwall, Michael; Whitford, Ryan
PATENT ASSIGNEE(S): Bayer CropScience G.m.b.H., Germany
SOURCE: PCT Int. Appl., 65 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005107465	A1	20051117	WO 2005-EP4688	20050430

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: EP 2004-11255 A 20040512

OTHER SOURCE(S): MARPAT 143:454391
GI

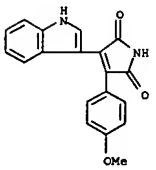


AB The 3,4-disubstituted maleimide derivs. I or salts thereof, wherein: X is aryl or heteroaryl which groups are unsubstituted or substituted; Y is NH or a covalent bond; and Z is aryl or heteroaryl which groups are unsubstituted or substituted, are prepared as plant growth regulators.

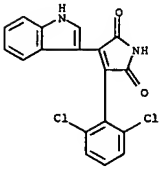
IT 221233-43-8P 869110-78-1P 869110-80-5P
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation as plant growth regulator)

RN 221233-43-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

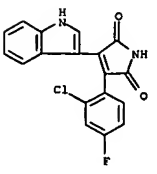
L6 ANSWER 7 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 869110-78-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,6-dichlorophenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 869110-80-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chloro-4-fluorophenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 8 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1026867 CAPLUS
DOCUMENT NUMBER: 143:319140
TITLE: Methods and compositions related to regulation of cytokine production by glycogen synthase kinase 3 (GSK-3)
INVENTOR(S): Martin, Michael
PATENT ASSIGNEE(S): The Uab Research Foundation, USA
SOURCE: PCT Int. Appl., 70 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005086814	A2	20050922	WO 2005-US7586	20050309

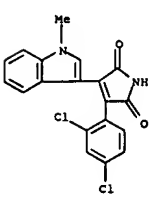
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2004-551646P P 20040309

AB This invention relates generally to a method of treating inflammation and associated diseases and disorders by administering an agent that inhibits glycogen synthase kinase 3 activity.

IT 280744-09-4, SB216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. related to regulation of cytokine production by inhibitors of glycogen synthase kinase 3 for treatment of inflammation)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



L6 ANSWER 8 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L6 ANSWER 9 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

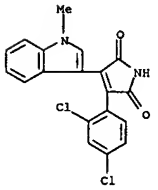
ACCESSION NUMBER: 2005:988238 CAPLUS
DOCUMENT NUMBER: 144:121206
TITLE: GSK-3β inhibitors attenuate the organ injury/dysfunction caused by endotoxemia in the rat
AUTHOR(S): Dugo, Laura; Collin, Marika; Allen, David A.; Patel, Nimesh S. A.; Bauer, Inge; Mervaala, Eero M. A.; Louhelainen, Marjut; Foster, Simon J.; Yaqoob, Muhammad M.; Thiemermann, Christoph
CORPORATE SOURCE: Centre for Experimental Medicine, Nephrology and Critical Care Medicine, The William Harvey Research Institute, St. Bartholomew's and The Royal London School of Medicine and Dentistry, London, UK
SOURCE: Critical Care Medicine (2005), 33(9), 1903-1912
CODEN: CCMDC7; ISSN: 0090-3493
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Objective: Serine-threonine protein kinase glycogen synthase kinase (GSK)-3 is involved in regulation of many cell functions, but its role in regulation of inflammatory response is unknown. Here we investigate the effects of GSK-3β inhibition on organ injury/dysfunction caused by lipopolysaccharide or coadministration of lipopolysaccharide and peptidoglycan in the rat. Design: Prospective, randomized study. Setting: University-based research laboratory Subjects: Ninety-nine anesthetized male Wistar rats. Interventions: Study 1: Rats received either i.v. Escherichia coli lipopolysaccharide (6 mg/kg) or vehicle (1 mL/kg; saline). Study 2: Rats received either i.v. E. coli lipopolysaccharide (1 mg/kg) and Staphylococcus aureus peptidoglycan (0.3 mg/kg) or vehicle. The potent and selective GSK-3β inhibitors TDZD-8 (1 mg/kg i.v.), SB216763 (0.6 mg/kg i.v.), and SB415286 (1 mg/kg i.v.) or vehicle (10% DMSO) was administered 30 mins before lipopolysaccharide or lipopolysaccharide and peptidoglycan. Measurements and main results: Endotoxemia resulted in increases in the serum levels of creatinine (indicator of renal dysfunction), aspartate aminotransferase, alanine aminotransferase (markers for hepatocellular injury), lipase (indicator of pancreatic injury), and creatine kinase (indicator of neuromuscular injury). Coadministration of lipopolysaccharide and peptidoglycan resulted in hepatocellular injury and renal dysfunction. All GSK-3β inhibitors attenuated the organ injury/dysfunction caused by lipopolysaccharide or lipopolysaccharide and peptidoglycan. GSK-3β inhibition reduced the Ser536 phosphorylation of nuclear factor-κB subunit p65 and the mRNA expression of nuclear factor-κB-dependent proinflammatory mediators but had no effect on the nuclear factor-κB/DNA binding activity in the lung. GSK-3β inhibition reduced the increase in nuclear factor-κB p65 activity caused by interleukin-1 in human embryonic kidney cells in vitro. Conclusions: The potent and selective GSK-3β inhibitors TDZD-8, SB216763, and SB415286 reduced the organ injury/dysfunction caused by lipopolysaccharide or lipopolysaccharide and peptidoglycan in the rat. We propose that GSK-3β inhibition may be useful in the therapy of the organ injury/dysfunction associated with sepsis, shock, and other diseases associated with local or systemic inflammation.

IT **280744-09-4**, SB216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GSK-3β inhibitors SB216763 reduced renal dysfunction, hepatocellular, pancreatic and neuromuscular injury caused by coadministration of LPS and peptidoglycan with induced ser9

L6 ANSWER 9 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
phosphorylation on GSK-3β and decreased p65 activity in rat)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 10 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

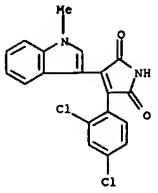
ACCESSION NUMBER: 2005:941554 CAPLUS
DOCUMENT NUMBER: 143:399728
TITLE: GSK-3β inhibitors reduce protein degradation in muscles from septic rats and in dexamethasone-treated myotubes
AUTHOR(S): Evenson, Amy R.; Fareed, Moin U.; Menconi, Michael J.; Mitchell, Jamie C.; Hasselgren, Per-Olof
CORPORATE SOURCE: Department of Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, 02215, USA
SOURCE: International Journal of Biochemistry & Cell Biology (2005), 37(10), 2226-2238
CODEN: IJBBFU; ISSN: 1357-2725
PUBLISHER: Elsevier Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Sepsis is associated with muscle wasting, mainly reflecting increased muscle proteolysis. Recent studies suggest that inhibition of GSK-3β activity may counteract catabolic stimuli in skeletal muscle. We tested the hypothesis that treatment of muscles from septic rats with the GSK-3β inhibitors LiCl and TDZD-8 would reduce sepsis-induced muscle proteolysis. Because muscle wasting during sepsis is, at least in part, mediated by glucocorticoids, we also tested the effects of GSK-3β inhibitors on protein degradation in dexamethasone-treated cultured myotubes. Treatment of incubated extensor digitorum longus muscles with LiCl or TDZD-8 reduced basal and sepsis-induced protein breakdown rates. When cultured myotubes were treated with LiCl or one of the GSK-3β inhibitors SB216763 or SB415286, protein degradation was reduced. Treatment of incubated muscles or cultured myotubes with LiCl, but not the other GSK-3β inhibitors, resulted in increased phosphorylation of GSK-3β at Ser9, consistent with inactivation of the kinase and suggesting that the other inhibitors used in the present expts. inhibit GSK-3β by phosphorylation-independent mechanisms. The present results suggest that GSK-3β inhibitors may be used to prevent or treat sepsis-induced, glucocorticoid-regulated muscle proteolysis.

IT **280744-09-4**, SB216763
RL: PAC (Pharmacological activity); BIOL (Biological study)
(GSK-3β inhibitors reduce protein degradation in muscles from septic rats and in dexamethasone-treated myotubes)

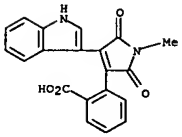
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

L6 ANSWER 10 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

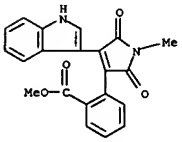


REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 11 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
pyrrol-3-yl]- (9CI) (CA INDEX NAME)

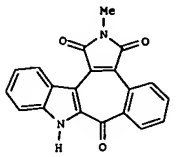


RN 864963-57-5 CAPLUS
CN Benzoic acid, 2-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-, methyl ester (9CI) (CA INDEX NAME)

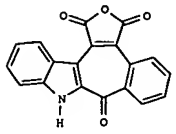


REFERENCE COUNT: 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 11 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:708413 CAPLUS
DOCUMENT NUMBER: 143:306120
TITLE: First efficient synthesis of novel oxophenyl-arcyriaflavin analogs
AUTHOR(S): Bourderioux, Aurelie; Routier, Sylvain; Beneteau, Valerie; Mercour, Jean-Yves
CORPORATE SOURCE: Institut de Chimie Organique et Analytique, UMR CNRS 6005, Universite d'Orleans, Orleans, 45067, Fr.
SOURCE: Tetrahedron Letters (2005), 46(36), 6071-6074
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

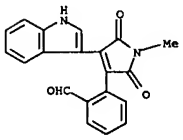


I



II

AB New oxophenylarcyriaflavins I and II were synthesized in a few efficient steps. The key steps involved at first a palladium cross-coupling between the 3-bromo-4-(1H-indol-3-yl)1-methylpyrrole-2,5-dione and the 2-formylphenylboronic acid or a Me 2-trialkylstannylbenzoate, followed by an intramol. acylation in a C-2 indolic position. All the sequence was carried out without any indolic protective group.
IT **864963-47-3P 864963-49-5P 864963-57-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(first efficient synthesis of novel oxophenyl-arcyriaflavin analogs)
RN 864963-47-3 CAPLUS
CN Benzaldehyde, 2-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]- (9CI) (CA INDEX NAME)



RN 864963-49-5 CAPLUS
CN Benzoic acid, 2-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-

L6 ANSWER 12 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:673288 CAPLUS
DOCUMENT NUMBER: 143:153287
TITLE: Preparation of indolylmaleimide derivatives as PKC inhibitors
INVENTOR(S): Van Eis, Maurice; Von Matt, Peter; Wagner, Juergen; Evenou, Jean-Pierre; Schuler, Walter
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068455	A1	20050728	WO 2005-EP502	20050119

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2004-1089 A 20040119
GB 2004-1090 A 20040119

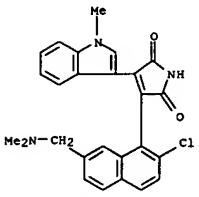
OTHER SOURCE(S): MARPAT 143:153287
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Title compds. I [R1 = H or (un)substituted alkyl; one of R2-5 = halo, alkoxy, alkyl, etc. and the other three are each H or all are H; R = (un)substituted naphthyl or pyridyl] and their pharmaceutically acceptable salts, are prepared and disclosed as inhibitors of protein kinase C (PKC). Thus, e.g., the bis-acetate salt of II was prepared by coupling of 2-(2-chloro-7-dimethylaminomethyl-naphthalen-1-yl)-acetamide (preparation given) with (1-methyl-1H-indol-3-yl)-oxo-acetic acid Me ester. The activity of I was evaluated in protein kinase Cδ assay and it was revealed that compds. of the invention inhibit PKCδ with an IC50 if less or equal to 1μM. I was inhibitor of PKC should prove useful in the treatment of infectious diseases, cardiovascular diseases and cancer. Pharmaceutical compns. comprising I are disclosed.
IT **860468-10-6P 860468-11-7P 860468-12-8P**
860468-13-9P 860468-14-0P 860468-15-1P
860468-16-2P 860468-17-3P 860468-18-4P
860468-19-5P 860468-20-8P 860468-21-9P
860468-22-0P 860468-23-1P 860468-24-2P
860468-25-3P 860468-26-4P 860468-27-5P

860468-28-6P 860468-29-7P 860468-30-0P
860468-31-1P 860468-32-2P 860468-33-3P
860468-34-4P 860468-35-5P 860468-36-6P
860468-37-7P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of indolylmaleimide derivs. as PKC inhibitors)

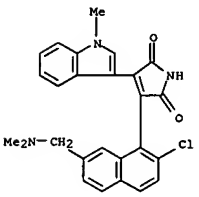
RN 860468-10-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-11-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)-, diacetate (9CI) (CA INDEX NAME)

CM 1

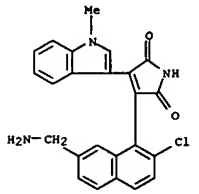
CRN 860468-10-6
CMF C26 H22 Cl N3 O2



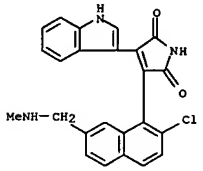
CM 2

CRN 64-19-7
CMF C2 H4 O2

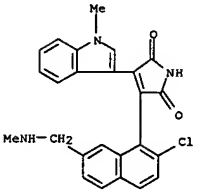
RN 860468-12-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-2-chloro-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



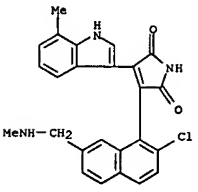
RN 860468-13-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(methylamino)methyl]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



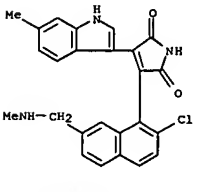
RN 860468-14-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(methylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-15-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(methylamino)methyl]-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

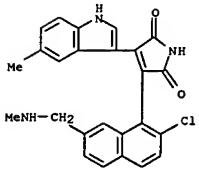


RN 860468-16-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(methylamino)methyl]-1-naphthalenyl]-4-(6-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

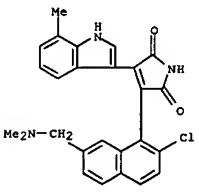


RN 860468-17-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(methylamino)methyl]-1-naphthalenyl]-

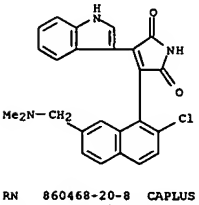
4-(5-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



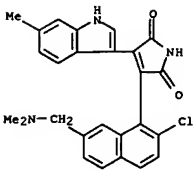
RN 860468-18-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



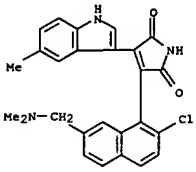
RN 860468-19-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



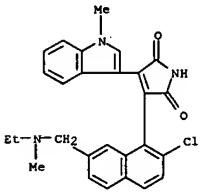
RN 860468-20-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(6-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



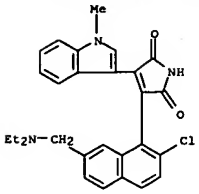
RN 860468-21-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(dimethylamino)methyl]-1-naphthalenyl]-4-(5-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



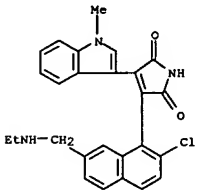
RN 860468-22-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(ethylmethylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



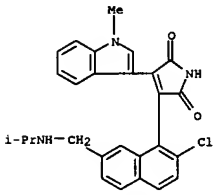
RN 860468-23-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(diethylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



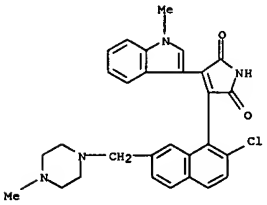
RN 860468-24-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(ethylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



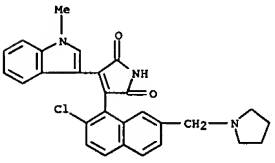
RN 860468-25-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[[(1-methylethyl)amino]methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



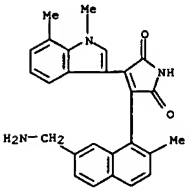
RN 860468-26-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-[(4-methyl-1-piperazinyl)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



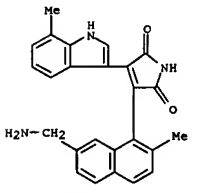
RN 860468-27-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-7-(1-pyrrolidinylmethyl)-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



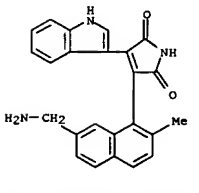
RN 860468-28-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-2-methyl-1-naphthalenyl]-4-(1,7-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



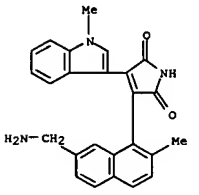
RN 860468-29-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-2-methyl-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



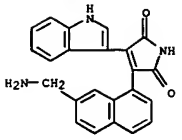
RN 860468-30-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-2-methyl-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



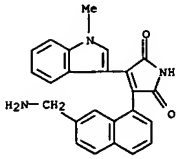
RN 860468-31-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-2-methyl-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



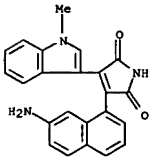
RN 860468-32-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



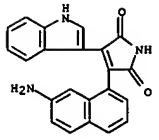
RN 860468-33-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(aminomethyl)-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



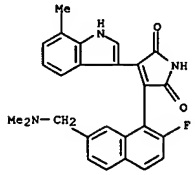
RN 860468-34-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-amino-1-naphthalenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



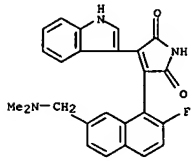
RN 860468-35-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-amino-1-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-36-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[(dimethylamino)methyl]-2-fluoro-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860468-37-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[(dimethylamino)methyl]-2-fluoro-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 13 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:673287 CAPLUS
DOCUMENT NUMBER: 143:172756
TITLE: Preparation of indolylmaleimide derivatives as PKC inhibitors
INVENTOR(S): Van Eis, Maurice; Von Matt, Peter; Wagner, Juergen; Evenou, Jean-Pierre
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005068454	A1	20050728	WO 2005-EP501	20050119

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2004-1089 A 20040119
GB 2004-1090 A 20040119

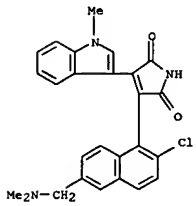
OTHER SOURCE(S): MARPAT 143:172756
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

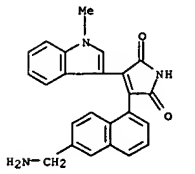
AB Title compds. I [R1 = H or (un)substituted alkyl; one of R2-5 = halo, alkoxy or alkyl and the other three are each H or R2, R4 and R5 are all H;
R = substituted naphthyl] and their pharmaceutically acceptable salts, are
prepared and disclosed as inhibitors of protein kinase C (PKC). Thus, e.g.,
II was prepared by coupling of
2-(2-chloro-6-dimethylaminomethyl-naphthalen-
1-yl)-acetamide (preparation given) with
(1-methyl-1H-indol-3-yl)-oxo-acetic
acid Me ester. The activity of II was evaluated in protein kinase
Cε assay and it was revealed that it inhibits PKCε with an
IC50 of 17.6 nm. I was inhibitor of PKC should prove useful in the
treatment of infectious diseases, inflammatory disease and cancer.
Pharmaceutical compns. comprising I are disclosed.
IT **860646-70-4P 860646-71-5P 860646-72-6P**
860646-73-7P 860646-74-8P 860646-75-9P
860646-76-0P 860646-77-1P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU

(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of indolylmaleimide derivs. as PKC inhibitors)

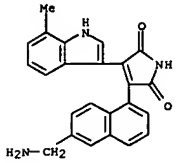
RN 860646-70-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-6-[(dimethylamino)methyl]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



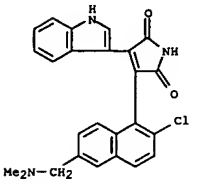
RN 860646-71-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[6-(aminomethyl)-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



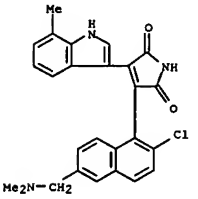
RN 860646-72-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[6-(aminomethyl)-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



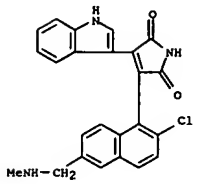
RN 860646-73-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-6-[(dimethylamino)methyl]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



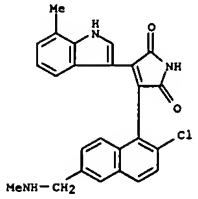
RN 860646-74-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-6-[(dimethylamino)methyl]-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



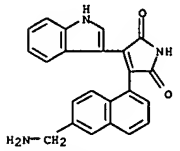
RN 860646-75-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-6-[(methylamino)methyl]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860646-76-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-6-[(methylamino)methyl]-1-naphthalenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 860646-77-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[6-(aminomethyl)-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2005:612449 CAPLUS
DOCUMENT NUMBER: 143:127818
TITLE: Method for in vitro differentiation of neuronal stem cells or cells derived from neuronal stem cells
INVENTOR(S): Maurer, Martin H.; Feldmann, Robert E.; Kuschinsky, Wolfgang; Schneider, Armin
PATENT ASSIGNEE(S): Axaron Bioscience A.-G., Germany
SOURCE: PCT Int. Appl., 64 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

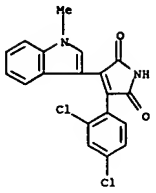
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005063966	A2	20050714	WO 2004-EP14673	20041223
WO 2005063966	A3	20051027		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
DE 10361444	A1	20050721	DE 2003-10361444	20031223
PRIORITY APPLN. INFO.:			DE 2003-10361444 A	20031223

AB The method for in vitro differentiation of neuronal stem cells comprises the following: the cells are brought into contact with a substance which inhibits a reaction of the Wnt signal transduction path, and said cells are cultivated in conditions enabling the cells to multiply and/or differentiate. In a preferred embodiment of the method, the neuronal stem cells differentiate to form cells which are similar to brain cells.

IT 280744-09-4
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(method for in vitro differentiation of neuronal stem cells or cells derived from neuronal stem cells)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 14 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



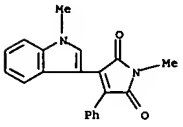
L6 ANSWER 15 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:511386 CAPLUS
DOCUMENT NUMBER: 143:193881
TITLE: Inhibition of hydrogen peroxide-induced necrotic cell death with 3-amino-2-indolylmaleimide derivatives
AUTHOR(S): Dodo, Kosuke; Katoh, Miho; Shimizu, Tadashi; Takahashi, Masahiro; Sodeoka, Mikiko
CORPORATE SOURCE: Institute of Multidisciplinary Research for Advanced Materials (IMRAM), Tohoku University, Aoba, Sendai, Miyagi, 980-8577, Japan
SOURCE: Bioorganic & Medicinal Chemistry Letters (2005), 15(12), 3114-3118
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Novel analogs of (indolyl)maleimide derivs. were synthesized and tested for cell death-inhibitory activity. It was found that 2-(1H-indol-3-yl)-3-(pentylamino)maleimide (I) was the most effective cell death inhibitor among the compds. tested. I inhibited necrotic cell death induced by H2O2, but not apoptotic cell death induced by etoposide. These results indicated that this novel cell death inhibitor is distinct from the well-known caspase inhibitor, Z-VAD, which can block apoptotic cell death, but not necrotic cell death. I is expected to be a powerful bioprobe for clarifying the unique signaling pathway of necrotic cell death.

IT **327602-10-8P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of (indolyl)maleimide derivs. and study of their activity toward inhibition of hydrogen peroxide-induced necrotic cell death and etoposide-induced apoptotic cell death)

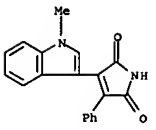
RN 327602-10-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



IT **125313-97-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of (indolyl)maleimide derivs. and study of their activity toward inhibition of hydrogen peroxide-induced necrotic cell death and etoposide-induced apoptotic cell death)

RN 125313-97-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

L6 ANSWER 15 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 16 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

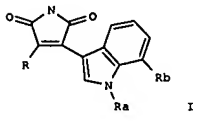
ACCESSION NUMBER: 2005:395073 CAPLUS
DOCUMENT NUMBER: 142:423872
TITLE: Indolyl-pyrroledione derivatives for the treatment of neurological and vascular disorders related to beta-amyloid generation and/or aggregation
INVENTOR(S): Auberson, Yves; Bilbe, Graeme; Kuhn, Rainer R.; Von Matt, Peter; Rueeger, Heinrich; Staufenbiel, Matthias; Wagner, Juergen; Zimmermann, Kaspar
PATENT ASSIGNEE(S): Novartis Ag, Switz.; Novartis Pharma GmbH
SOURCE: PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005039549	A1	20050506	WO 2004-EP12082	20041026

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

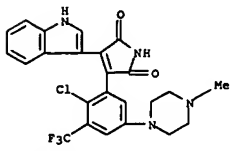
PRIORITY APPLN. INFO.: GB 2003-25032 A 20031027
GB 2003-25176 A 20031028

OTHER SOURCE(S): MARPAT 142:423872
GI



AB The invention relates to the use of an inhibitor of formula I (where Ra = C1-4 alkyl, etc., Rb = H, C1-4 alkyl, R = radical formula), or a pharmaceutically acceptable salt thereof having an activity on protein kinases PKC alpha, PKC beta, PKC gamma, PKC epsilon, PKC theta, CDK-1, KDR, PKA, Flt-1, Flt-2, Flt-3 or Flt-4, or on a combination of the above enzymes, for the treatment and/or prevention of neurol. and vascular disorders related to beta-amyloid generation and/or aggregation such as neurodegenerative diseases like Down's Syndrome, memory and cognitive impairment, dementia, amyloid neuropathies, brain inflammation, nerve and brain trauma, vascular amyloidosis, or cerebral hemorrhage with

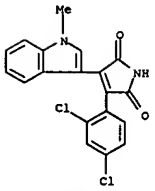
L6 ANSWER 16 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
amyloidosis.
IT 850798-87-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(indolyl-pyrroledione derivs. for treatment of neurol. and vascular disorders related to beta-amyloid generation and/or aggregation)
RN 850798-87-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-5-(4-methyl-1-piperazinyl)-3-(trifluoromethyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

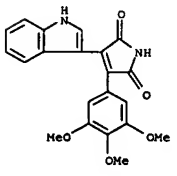
L6 ANSWER 17 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:366859 CAPLUS
DOCUMENT NUMBER: 143:473102
TITLE: Gene array analysis of Wnt-regulated genes in C3H10T1/2 cells
AUTHOR(S): Jackson, Amanda; Vayssiere, Beatrice; Garcia, Teresa; Newell, William; Baron, Roland; Roman-Roman, Sergio; Rawadi, Georges
CORPORATE SOURCE: Proskelia Pharmaceuticals, Romainville, 93230, Fr.
SOURCE: Bone (San Diego, CA, United States) (2005), 36(4), 585-598
CODEN: BONEDL; ISSN: 8756-3282
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Wnt/β-catenin signaling is involved in a large variety of modeling and remodeling processes including cell polarity, cell differentiation, and cell migration. Recently, a role of the Wnt pathway in bone biol. has
been demonstrated. However, the precise mechanism by which Wnt proteins regulate bone formation still remains to be elucidated. We have previously shown that the Wnt pathway mediates induction of alkaline phosphatase, an osteoblast differentiation marker, in the pluripotent mesenchymal cells C3H10T1/2. In the present study, we performed a genome-wide expression anal. using Affymetrix oligonucleotide chips to determine the Wnt3a-induced gene expression profile in C3H10T1/2 cells. The
expression profiles of 447 Wnt3a-regulated genes, classified into distinct
functional families, are presented here. Our data reveal that Wnt3a regulates several genes that are involved in osteoblast and adipocyte differentiation. Importantly, Wnt3a induces the expression of osteoprotegerin by a β-catenin dependent mechanism indicating that the Wnt pathway may also affect osteoclastogenesis. Through the anal. of our expression profiling data, we have established a TaqMan panel as a tool to rapidly compare the expression profiles of a specific set of genes
induced by distinct stimuli acting in the Wnt/β-catenin pathway. Using the TaqMan panel, we have compared the gene expression profiles induced by Wnt1, Wnt2, and Wnt3a in C3H10T1/2 cells, and also by two different GSK-3β inhibitors: LiCl and SB216763. Our data show that Wnt1 and Wnt3a act in a similar manner, distinct from Wnt2. Finally, we found that LiCl and SB216763 displayed different profiles in the TaqMan panel evidencing their distinct inhibitory action toward GSK-3β. Overall, data presented herein will aid further understanding of the involvement of the Wnt signaling pathway in its regulation of osteoblast and adipocyte differentiation and function and, in addition, will enhance current knowledge of the Wnt signaling pathway itself.
IT 280744-09-4, SB216763
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(effect on gene expression profile; gene array anal. of Wnt-regulated genes during osteoblast and adipocyte differentiation of pluripotent mesenchymal C3H10T1/2 cells)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 17 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 18 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:301248 CAPLUS
DOCUMENT NUMBER: 143:257354
TITLE: 3-(1H-Indol-3-yl)-4-(3,4,5-trimethoxyphenyl)-2,5-dihydro-1H-pyrrole-2,5-dione
AUTHOR(S): Peifer, Christian; Schollmeyer, Dieter; Dannhardt, Gerd
CORPORATE SOURCE: Pharmazeutisches Institut, Universitaet Tuebingen, Tuebingen, 72076, Germany
SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2005), E61(3), o721-o723
CODEN: ACSEBH; ISSN: 1600-5368
URL: http://journals.iucr.org/e/issues/2005/03/00/bt66
00/index.html
PUBLISHER: Blackwell Publishing Ltd.
DOCUMENT TYPE: Journal; (online computer file)
LANGUAGE: English
AB The crystal structure of the title compound, C21H18N2O5, was determined to study
the electrocyclic reactivity of 3,4-diaryl-1H-pyrrole-2,5-dione derivs. Crystallog. data are given. Intermol. H bonds form sheets.
IT 863223-52-3
RL: PRP (Properties)
(crystal structure of)
RN 863223-52-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(3,4,5-trimethoxyphenyl)- (9CI) (CA INDEX NAME)

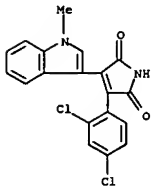


REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 19 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:296082 CAPLUS
DOCUMENT NUMBER: 143:146505
TITLE: Inhibition of glycogen synthase kinase-3 protects cells from intrinsic but not extrinsic oxidative stress
AUTHOR(S): King, Taj D.; Jope, Richard S.
CORPORATE SOURCE: Department of Psychiatry and Behavioral Neurobiology, University of Alabama at Birmingham, Birmingham, AL, 35294-0017, USA
SOURCE: NeuroReport (2005), 16(6), 597-601
CODEN: NERPEZ; ISSN: 0959-4965
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Oxidative stress is linked to neuronal dysfunction and death in many diseases. Glycogen synthase kinase-3 often promotes apoptosis, so this investigation tested whether glycogen synthase kinase-3 is linked to oxidative stress-induced apoptosis. Both intrinsic oxidative stress induced by the mitochondrial inhibitor rotenone and extrinsic oxidative stress induced by exogenously added H2O2 activated Bax, caspase-2, and caspase-3 in human neuroblastoma SH-SY5Y cells. Inhibitors of glycogen synthase kinase-3 blocked rotenone-induced, but not H2O2-induced, activation of both caspases, but not Bax activation. Thus, glycogen synthase kinase-3 is an important component of intrinsic oxidative stress-induced apoptosis that acts downstream of mitochondrial Bax activation, and there are substantial differences in the role of glycogen synthase kinase-3, and lithium's effects, in apoptotic signaling induced by intrinsic and extrinsic oxidative stress.

IT **280744-09-4**, SB216763
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycogen synthase kinase-3 inhibitor SB216763 protected mitochondrial inhibitor rotenone-induced intrinsic oxidative stress by inhibiting caspase-3 activation in human neuroblastoma SH-SY5Y cell)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

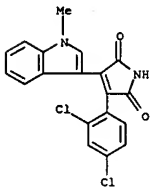
L6 ANSWER 20 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:283611 CAPLUS
DOCUMENT NUMBER: 142:349105
TITLE: Methods and materials for identifying agents which modulate bone remodeling and agents identified thereby
INVENTOR(S): Chatterjee-Kishore, Moitreyee; Robinson, John A.; Bhat, Bheem M.; Bex, Frederick James, III
PATENT ASSIGNEE(S): Wyeth, John, and Brother Ltd., USA
SOURCE: PCT Int. Appl., 173 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005028678	A2	20050331	WO 2004-US17951	20040607
WO 2005028678	A3	20050909		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2526845	AA	20050331	CA 2004-2526845	20040607
PRIORITY APPLN. INFO.:			US 2003-476164P P	20030606
			US 2003-501398P P	20030910
			WO 2004-US17951 W	20040607

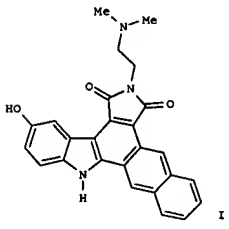
AB The invention discloses compns., compds., apparatuses and methods of using
them to study bone mineralization and identify agents that regulate bone mineralization. Methods of using bone mineralization gene profiles and signatures for compound screening and research are also disclosed. Reagents
for modulating bone mineralization are provided for both therapeutic and research usage.

IT **280744-09-4**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and materials for identifying agents which modulate bone remodeling and agents identified thereby)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 20 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



L6 ANSWER 21 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:128220 CAPLUS
DOCUMENT NUMBER: 142:373633
TITLE: Synthesis and biological evaluation of novel naphthocarbazoles as potential anticancer agents
AUTHOR(S): Routier, Sylvain; Peixoto, Paul; Merour, Jean-Yves; Coudert, Gerard; Dias, Nathalie; Bailly, Christian; Pierre, Alain; Leonce, Stephane; Caignard, Daniel-Henry
CORPORATE SOURCE: Institut de Chimie Organique et Analytique, UMR CNRS 6005, Universite d'Orleans, Orleans, 45067, Fr.
SOURCE: Journal of Medicinal Chemistry (2005), 48(5), 1401-1413
CODEN: JMCMAR; ISSN: 0022-2623
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:373633
GI



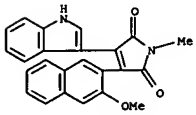
I

AB The efficient synthesis involving palladium-catalyzed reactions and biol. evaluation of naphthocarbazoles, e.g., I, designed as potential anticancer
agents, are reported. The use of 5- and 6-benzyloxyindoles generated three substitution sites which were successively exploited to introduce several hydrophilic side chains. The cytotoxicity of the designed compds.
was evaluated on three cell lines. Several compds. showed a marked cytotoxicity with IC50 values in the sub-micromolar range. This was the case for I, bearing a dimethylaminoethyl side chain, which was extremely cytotoxic to L1210 and DU145 cells (IC50: 36 nM, 108 nM) and induced an accumulation of L1210 cells in the G2+M phases of the cell cycle. Some of
the most cytotoxic compds. were tested for inhibition of CDK-5, GSK-3 and topoisomerase I, and their interaction with DNA was also evaluated. Interaction with DNA was detected, suggesting that nucleic acids represent
a privileged target for these mols.

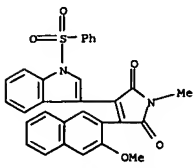
IT **386235-54-7P 386235-55-8P 386235-57-0P**
386235-58-1P 386235-59-2P 386235-60-5P
849404-38-2P 849404-39-3P 849404-41-7P

849404-42-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. and anticancer activity of naphthocarbazole deriva. starting from indolyl(bromo)pyrrolediones and arylboronic acid or aryltin using cross-coupling reactions as the key steps)

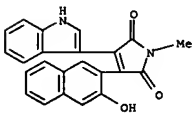
RN 386235-54-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(3-methoxy-2-naphthalenyl)-1-methyl- (9CI) (CA INDEX NAME)



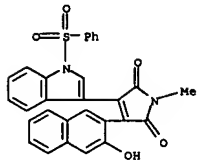
RN 386235-55-8 CAPLUS
CN 1H-Indole, 3-[2,5-dihydro-4-(3-methoxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



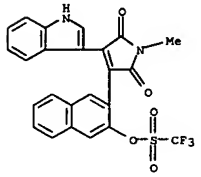
RN 386235-57-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-hydroxy-2-naphthalenyl)-4-(1H-indol-3-yl)-1-methyl- (9CI) (CA INDEX NAME)



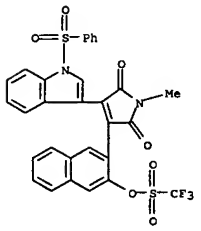
RN 386235-58-1 CAPLUS
CN 1H-Indole, 3-[2,5-dihydro-4-(3-hydroxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



RN 386235-59-2 CAPLUS
CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

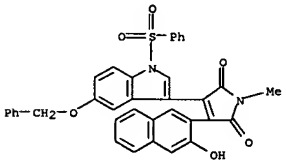


RN 386235-60-5 CAPLUS
CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[1-(phenylsulfonyl)-1H-indol-3-yl]-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

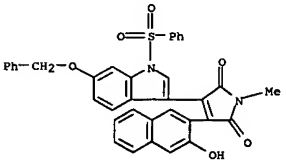


RN 849404-38-2 CAPLUS

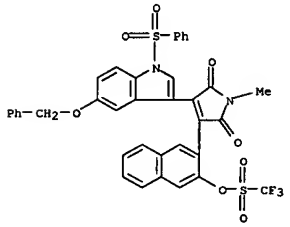
CN 1H-Indole, 3-[2,5-dihydro-4-(3-hydroxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-5-(phenylmethoxy)-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



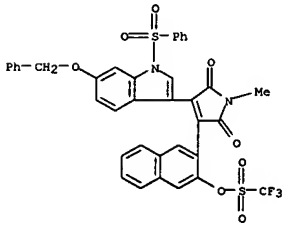
RN 849404-39-3 CAPLUS
CN 1H-Indole, 3-[2,5-dihydro-4-(3-hydroxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-6-(phenylmethoxy)-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)



RN 849404-41-7 CAPLUS
CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[5-(phenylmethoxy)-1-(phenylsulfonyl)-1H-indol-3-yl]-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)



RN 849404-42-8 CAPLUS
CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[6-(phenylmethoxy)-1-(phenylsulfonyl)-1H-indol-3-yl]-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 22 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

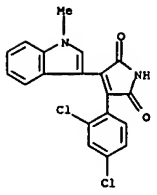
ACCESSION NUMBER: 2004:1057908 CAPLUS
DOCUMENT NUMBER: 142:192931
TITLE: Exploitation of KESTREL to identify NDRG family members as physiological substrates for SGK1 and GSK3
AUTHOR(S): Murray, James T.; Campbell, David G.; Morrice, Nicholas; Auld, Gillian C.; Shpiro, Natalia; Marquez, Rodolpho; Peggie, Mark; Bain, Jenny; Bloomberg, Graham B.; Grahammer, Florian; Lang, Florian; Wulff, Peer; Kuhl, Dietmar; Cohen, Philip
CORPORATE SOURCE: MRC Protein Phosphorylation Unit, School of Life Sciences, University of Dundee, Dundee, DD1 5EH, UK
SOURCE: Biochemical Journal (2004), 384(3), 477-488
CODEN: BIJOAK; ISSN: 0264-6021
PUBLISHER: Portland Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB We detected a protein in rabbit skeletal muscle exts. that was phosphorylated rapidly by SGK1 (serum- and glucocorticoid-induced kinase 1), but not by protein kinase Bα, and identified it as NDRG2 (N-myc downstream-regulated gene 2). SGK1 phosphorylated NDRG2 at Thr330, Ser332 and Thr348 in vitro. All three residues were phosphorylated in skeletal muscle from wild-type mice, but not from mice that do not express SGK1. SGK1 also phosphorylated the related NDRG1 isoform at Thr328, Ser330 and Thr346 (equivalent to Thr330, Ser332 and Thr348 of NDRG2), as well as Thr356 and Thr366. Residues Thr346, Thr356 and Thr366 are located within identical decapeptide sequences GTRSRSHTSE, repeated three times in NDRG1.
These threonines were phosphorylated in NDRG1 in the liver, lung, spleen and skeletal muscle of wild-type mice, but not in SGK1-/- mice. Knock-down of SGK1 in HeLa cells using small interfering RNA also suppressed phosphorylation of the threonine residues in the repeat region of NDRG1. The phosphorylation of NDRG1 by SGK1 transformed it into an excellent substrate for GSK3 (glycogen synthase kinase 3), which could then phosphorylate Ser342, Ser352 and Ser362 in the repeat region. Incubation of HeLa cells with the specific GSK3 inhibitor CT 99021 increased the electrophoretic mobility of NDRG1 in HeLa cells, demonstrating that this protein is phosphorylated by GSK3 in cells. Our results identify NDRG1 and NDRG2 as physiol. substrates for SGK1, and demonstrate that phosphorylation of NDRG1 by SGK1 primes it for phosphorylation by GSK3.

IT **280744-09-4**, SB 216763
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(phosphorylation of NDRG1 in liver, lung, spleen and skeletal muscle by serum/glucocorticoid-inducible protein kinase 1)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 22 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 23 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

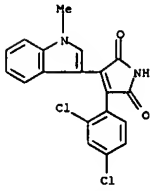
ACCESSION NUMBER: 2004:916807 CAPLUS
DOCUMENT NUMBER: 142:232469
TITLE: Involvement of c-Myc in growth inhibition of Hep 3B human hepatoma cells by a vitamin K analog
AUTHOR(S): Ge, Lisheng; Wang, Ziqiu; Wang, Meifang; Kar, Siddhartha; Carr, Brian I.
CORPORATE SOURCE: Department of Surgery, Liver Cancer Center, Starzl Transplant Institute, School of Medicine, University of Pittsburgh, Pittsburgh, PA, 15213, USA
SOURCE: Journal of Hepatology (2004), 41(5), 823-829
CODEN: JOHEEC; ISSN: 0168-8278
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Background/Aims: A synthetic vitamin K analog, compound 5 (Cpd 5), is a potent inhibitor of cell growth. The aim was to investigate whether c-Myc was involved in Cpd 5-induced cell growth inhibition. Methods: Human hepatoma cells (Hep 3B) were cultured and treated with Cpd 5, and c-Myc protein expression and phosphorylation were investigated using Western blot anal. Results: Cpd 5 was found to inhibit c-Myc protein expression and induce c-Myc phosphorylation in Hep 3B cells. The phosphorylation of c-Myc was induced by both Cpd 5-mediated persistent extracellular signal-regulated kinase (ERK) phosphorylation and Cpd 5 increased glycogen synthase kinase-3 (GSK-3) activity. When using GSK-3 inhibitor, SB216763, c-Myc phosphorylation was significantly decreased and c-Myc levels were restored in Cpd 5 treated cells, suggesting that Cpd 5-mediated increase of GSK-3 activity enhanced c-Myc degradation and resulted in reduction of c-Myc levels. The lower c-Myc levels were found to cause altered expression of two c-Myc target genes, growth arrest gene gadd45 and ornithine decarboxylase (ODC). Conclusions: The results suggest that Cpd 5-mediated c-Myc phosphorylation resulted in enhanced c-Myc protein degradation and reduced c-Myc protein levels, which may contribute to cell growth inhibition by Cpd 5.

IT **280744-09-4**, SB216763
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(Cpd 5 induction of c-Myc phosphorylation was antagonized by GSK inhibitor SB216763 and in combination with MEK inhibitor U0126 Cpd 5 action was further decreased in human hepatoma Hep 3B cells)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 23 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



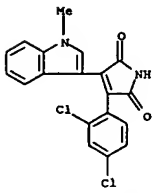
REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:902218 CAPLUS
DOCUMENT NUMBER: 141:400891
TITLE: Drug for nerve regeneration containing glycogen synthase kinase-3 inhibitors
INVENTOR(S): Morishita, Tsuyoshi; Sakurada, Kazuhiro; Suzuki, Keiko; Ikeda, Shunichi
PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
SOURCE: PCT Int. Appl., 115 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

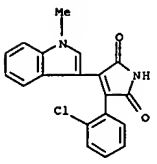
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004091663	A1	20041028	WO 2004-JP5503	20040416
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2522712	AA	20041028	CA 2004-2522712	20040416
PRIORITY APPLN. INFO.:			JP 2003-114579 A	20030418
			WO 2004-JP5503 W	20040416

OTHER SOURCE(S): MARPAT 141:400891
AB It is intended to provide a drug for nerve degeneration, a nerve stem cell neurogenesis promoter, a neuron obtained by culturing a nerve stem cell in the presence of the neurogenesis promoter, and a method of producing the neuron. To achieve the above objects, a drug for nerve degeneration which contains as the active ingredient a substance inhibiting the activity of a glycogen synthase kinase-3, a nerve stem cell neurogenesis promoter containing this substance as the active ingredient, a neuron obtained by culturing a nerve stem cell in the presence of the neurogenesis promoter, and a method of producing the neuron are provided. The above-described drugs are useful as remedies for nerve diseases such as Parkinson's disease, Alzheimer's disease, Down's disease, cerebrovascular disorder, cerebral stroke, spinal injury, Huntington's chorea, multiple sclerosis, amyotrophic lateral sclerosis, epilepsy, anxiety disorder, integration dysfunction syndrome, depression and manic-depressive. The effects of lithium chloride, Kenpaullone, indirubin-3'-monoxime, and short interference RNA (siRNA) on neurogenesis promotion were in vitro tested. Also, a tablet SB-216763 5 mg/100 mg tablet was formulated.
IT **280744-09-4P**, SB 216763
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

L6 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
(Uses)
(glycogen synthase kinase-3 inhibitors for nerve regeneration)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

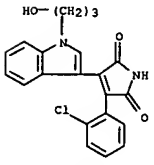


IT **125314-07-0 280744-10-7 280744-11-8**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycogen synthase kinase-3 inhibitors for nerve regeneration)
RN 125314-07-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI)
(CA INDEX NAME)

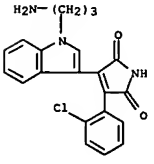


RN 280744-10-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

L6 ANSWER 24 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



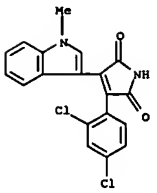
RN 280744-11-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-aminopropyl)-1H-indol-3-yl]-4-(2-chlorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 25 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:839779 CAPLUS
DOCUMENT NUMBER: 141:360317
TITLE: Inhibition of glycogen synthase kinase-3 represses androgen receptor activity and prostate cancer cell growth
AUTHOR(S): Mazor, Michal; Kawano, Yoshiaki; Zhu, Hanneng; Waxman, Jonathan; Kypta, Robert M.
CORPORATE SOURCE: Prostate Cancer Research Group, Department of Cancer Cell Biology, Division of Medicine, Imperial College, London, W12 0NN, UK
SOURCE: Oncogene (2004), 23(47), 7882-7892
CODEN: ONCNES; ISSN: 0950-9232
PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The transcriptional activity of the androgen receptor (AR) is regulated by interaction with various coregulators, one of which is β-catenin. Interest in the role of β-catenin in prostate cancer has been stimulated by reports showing that it is aberrantly expressed in the cytoplasm and/or nucleus in up to 38% of hormone-refractory tumors and that overexpression of β-catenin results in activation of AR transcriptional activity. We have examined the effect of depleting endogenous β-catenin on AR activity using Axin and RNA interference. Axin, which promotes β-catenin degradation, inhibited AR transcriptional activity. However, this did not require the β-catenin-binding domain of Axin. Depletion of β-catenin using RNA interference increased, rather than decreased, AR activity, suggesting that endogenous β-catenin is not a transcriptional coactivator for the AR. The glycogen synthase kinase-3 (GSK-3)-binding domain of Axin prevented formation of a GSK-3-AR complex and was both necessary and sufficient for inhibition of AR-dependent transcription. A second GSK-3-binding protein, FRAT, also inhibited AR transcriptional activity, as did the GSK-3 inhibitors SB216763 and SB415286. Finally, inhibition of GSK-3 reduced the growth of AR-expressing prostate cancer cell lines. Our observations suggest a potential new therapeutic application for GSK-3 inhibitors in prostate cancer.
IT **280744-09-4**, SB216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of GSK3 represses AR activity and prostate cancer cell growth)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 25 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:696367 CAPLUS
DOCUMENT NUMBER: 141:225308
TITLE: Preparation of indolylmaleimides for preventing or treating disorders or diseases mediated by T lymphocytes and/or PKC or GSK-3β
INVENTOR(S): Von Matt, Peter; Wagner, Juergen
PATENT ASSIGNEE(S): Novartis AG, Switz.; Novartis Pharma GmbH
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004072062	A2	20040826	WO 2004-EP1323	20040212
WO 2004072062	A3	20041104		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2513613	AA	20040826	CA 2004-2513613	20040212
EP 1597250	A2	20051123	EP 2004-710393	20040212
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MX, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.: GB 2003-3319 A 20030213
WO 2004-EP1323 W 20040212

OTHER SOURCE(S): MARPAT 141:225308
GI

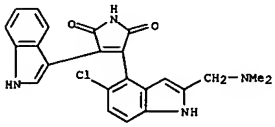
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; Ra = H, alkyl, hydroxyalkyl, aminoalkyl, etc.; Rb = H, halo, alkyl, alkoxy; R = II, III (wherein R1, R3 = heterocyclyl, XRcY; X = a direct bond, O, S, NR11; R11 = H, alkyl; Rc = (un)substituted alkylene; Y = OH, (un)substituted NH2, etc.; R2, R4 = H, halo, alkyl, alkoxy, CF3, CN, NO2, NH2)], were prepared E.g., a multi-step synthesis of
IV which showed, for example, IC50 of 5.4 nM against PKCθ and IC50 of 18 nM against GSK-3β, is given. The pharmaceutical composition comprising the compound I is claimed.

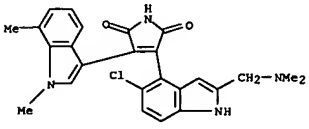
IT 748153-05-1P 748153-06-2P 748153-07-3P
748153-08-4P 748153-09-5P 748153-10-8P
748153-11-9P 748153-12-0P 748153-13-1P
748153-14-2P 748153-15-3P 748153-16-4P
748153-17-5P 748153-18-6P 748153-19-7P
748153-20-0P 748153-21-1P 748153-22-2P
748153-23-3P 748153-24-4P 748153-25-5P
748153-26-6P 748153-27-7P 748153-28-8P
748153-29-9P 748153-30-2P 748153-31-3P
748153-32-4P 748153-33-5P 748153-34-6P
748153-35-7P 748153-36-8P 748153-37-9P
748153-38-0P 748153-39-1P 748153-40-4P
748153-41-5P 748153-42-6P 748153-43-7P
748153-44-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of indolylmaleimides for preventing or treating disorders or diseases mediated by T lymphocytes and/or PKC or GSK-3β)

L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

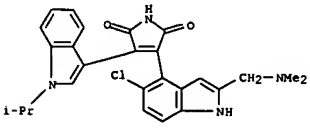
RN 748153-05-1 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[(dimethylamino)methyl]-1H-indol-4-yl]-
4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 748153-06-2 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[(dimethylamino)methyl]-1H-indol-4-yl]-
4-(1,7-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

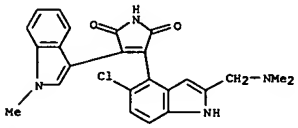


RN 748153-07-3 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[(dimethylamino)methyl]-1H-indol-4-yl]-
4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

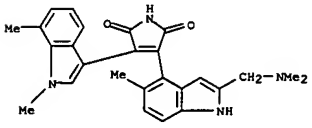


L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

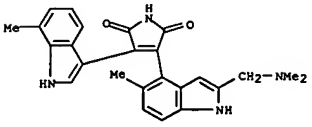
RN 748153-08-4 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[(dimethylamino)methyl]-1H-indol-4-yl]-
4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



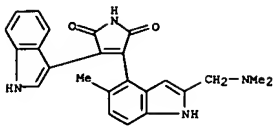
RN 748153-09-5 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-[(dimethylamino)methyl]-5-methyl-1H-indol-4-yl]-
4-(1,7-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



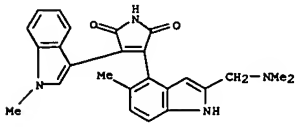
RN 748153-10-8 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-[(dimethylamino)methyl]-5-methyl-1H-indol-4-yl]-
4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



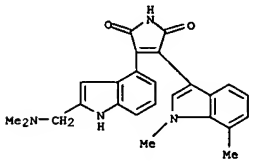
RN 748153-11-9 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-[(dimethylamino)methyl]-5-methyl-1H-indol-4-yl]-
4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



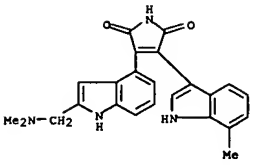
RN 748153-12-0 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-[(dimethylamino)methyl]-5-methyl-1H-indol-4-yl]-
4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



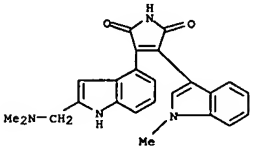
RN 748153-13-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[(dimethylamino)methyl]-1H-indol-4-yl]-4-(1,7-
dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



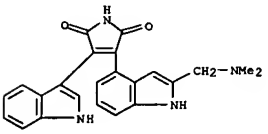
RN 748153-14-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[(dimethylamino)methyl]-1H-indol-4-yl]-4-(7-
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



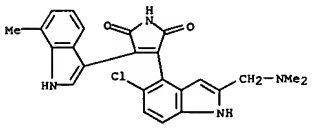
RN 748153-15-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[(dimethylamino)methyl]-1H-indol-4-yl]-4-(1-
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



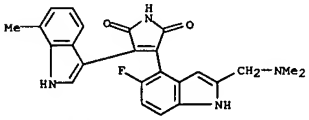
RN 748153-16-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[(dimethylamino)methyl]-1H-indol-4-yl]-4-(1H-
indol-3-yl)- (9CI) (CA INDEX NAME)



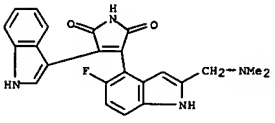
RN 748153-17-5 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[(dimethylamino)methyl]-1H-indol-4-yl]-
4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



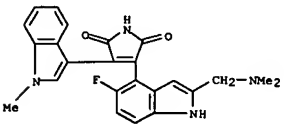
RN 748153-18-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-[(dimethylamino)methyl]-5-fluoro-1H-indol-4-yl]-
4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



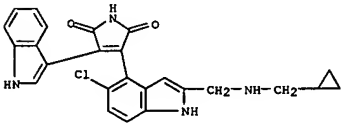
RN 748153-19-7 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-[(dimethylamino)methyl]-5-fluoro-1H-indol-4-yl]-
4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



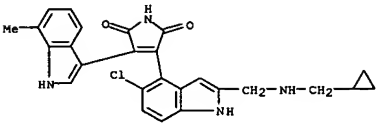
RN 748153-20-0 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-[(dimethylamino)methyl]-5-fluoro-1H-indol-4-yl]-
4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



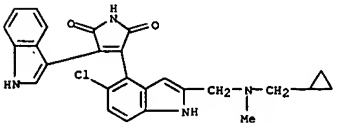
RN 748153-21-1 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[[(cyclopropylmethyl)amino]methyl]-1H-
indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



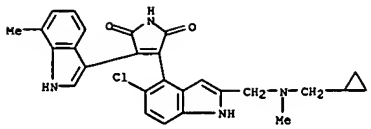
RN 748153-22-2 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[[(cyclopropylmethyl)amino]methyl]-1H-
indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



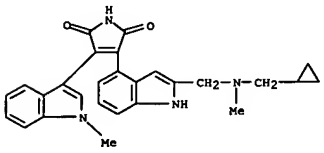
RN 748153-23-3 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[[(cyclopropylmethyl)methylamino]methy
l]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



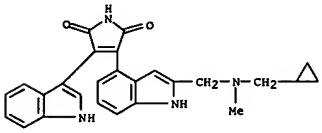
RN 748153-24-4 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[[(cyclopropylmethyl)methylamino]methy
l]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



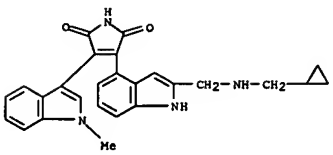
RN 748153-25-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[[(cyclopropylmethyl)methylamino]methyl]-1H-indol-4-yl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



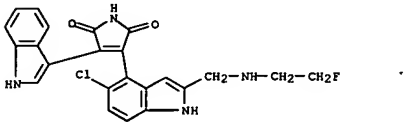
RN 748153-26-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[[(cyclopropylmethyl)methylamino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



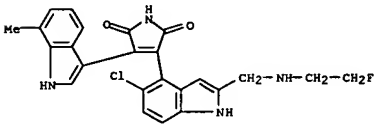
RN 748153-27-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[[(cyclopropylmethyl)amino]methyl]-1H-indol-4-yl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



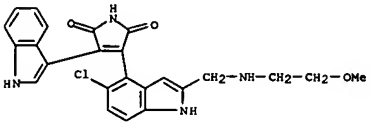
RN 748153-28-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[[(2-fluoroethyl)amino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



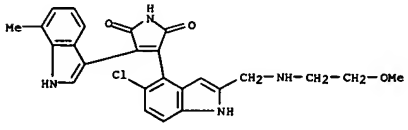
RN 748153-29-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[[(2-fluoroethyl)amino]methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



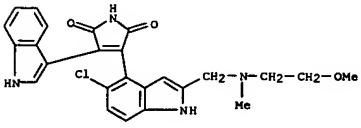
RN 748153-30-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[[(2-methoxyethyl)amino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



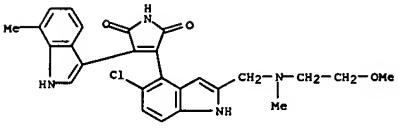
RN 748153-31-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[[(2-methoxyethyl)amino]methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



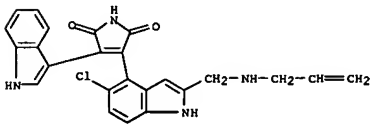
RN 748153-32-4 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[[(2-methoxyethyl)methylamino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



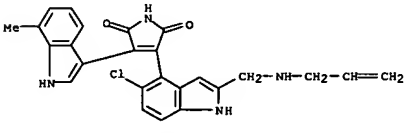
RN 748153-33-5 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[[(2-methoxyethyl)methylamino]methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



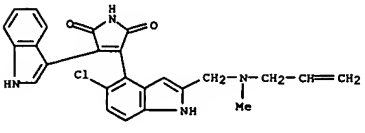
RN 748153-34-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-propenylamino)methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



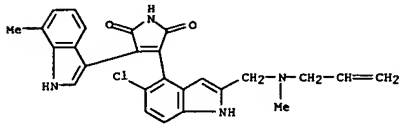
RN 748153-35-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(2-propenylamino)methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



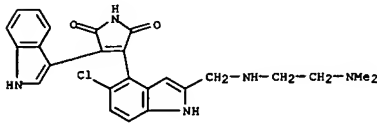
RN 748153-36-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(methyl-2-propenylamino)methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



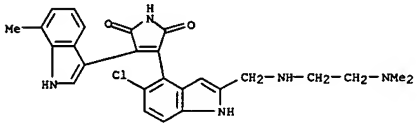
L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
RN 748153-37-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-2-[(methyl-2-propenylamino)methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 748153-38-0 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[[[2-(dimethylamino)ethyl]amino]methyl]-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

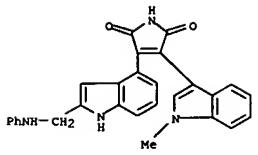


RN 748153-39-1 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-[[[2-(dimethylamino)ethyl]amino]methyl]-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

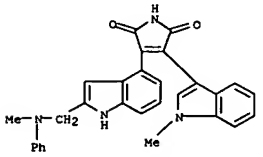


RN 748153-40-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[2-[(phenylamino)methyl]-1H-indol-4-yl]- (9CI) (CA INDEX NAME)

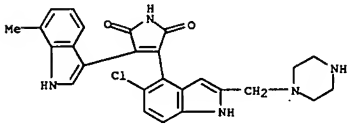
L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 748153-41-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[2-[(methylphenylamino)methyl]-1H-indol-4-yl]- (9CI) (CA INDEX NAME)

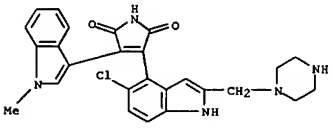


RN 748153-42-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-(1-piperazinylmethyl)-1H-indol-4-yl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

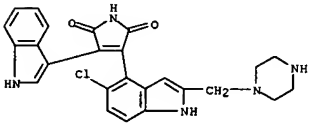


RN 748153-43-7 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-(1-piperazinylmethyl)-1H-indol-4-yl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 26 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 748153-44-8 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-2-(1-piperazinylmethyl)-1H-indol-4-yl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



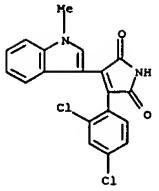
L6 ANSWER 27 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:286907 CAPLUS
DOCUMENT NUMBER: 140:368533
TITLE: Opioid-Induced Cardioprotection Occurs via Glycogen Synthase Kinase β Inhibition During Reperfusion in Intact Rat Hearts
AUTHOR(S): Gross, Eric R.; Hsu, Anna K.; Gross, Garrett J.
CORPORATE SOURCE: Medical College of Wisconsin, Department of Pharmacology and Toxicology, Milwaukee, WI, 53226, USA
SOURCE: Circulation Research (2004), 94(7), 960-966
CODEN: CIRUAL; ISSN: 0009-7330
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Glycogen synthase kinase (GSK) inhibition produced by ischemic preconditioning has been previously shown to be regulated through phosphatidylinositol-3 kinase (PI3K). Therefore, we determined whether opioid-induced cardioprotection (OIC) occurs during reperfusion by altering GSK phosphorylation through PI3K and target of rapamycin (TOR). Furthermore, we determined if selective GSK inhibitors, SB216763(SB21) or SB415286(SB41), emulate OIC. Rats were treated with the nonselective opioid agonist, morphine (MOR, 0.3 mg/kg), the δ-selective opioid agonist BW373U86 (BW, 1 mg/kg), or the GSK inhibitors, SB21 (0.6 mg/kg) or SB41(1.0 mg/kg), either 10 min before ischemia or 5 min before reperfusion. Five minutes before opioid or SB21 treatment, some rats received either the PI3K inhibitor wortmannin (15 μg/kg) or LY294002 (0.3 mg/kg) or the TOR inhibitor rapamycin (3 μg/kg). After 30 min of ischemia followed by 2 h of reperfusion, infarct size was assessed. MOR, BW, SB41, and SB21 reduced infarct size compared with vehicle when administered before ischemia (42.9±2.6, 40.3±2.3, 46.6±1.6, 42.2±1.8 vs. 60.0±1.1%, resp.; P<0.001) and showed similar protection when administered 5 min before reperfusion (43.6±2.3, 40.2±2.6, 44.8±2.8, 39.4±0.8%, resp.; P<0.001). Wortmannin, LY294002, and rapamycin were found to inhibit OIC; however, they did not abrogate SB21-induced infarct size reduction At 5 min of reperfusion, both MOR and BW increased P-GSKβ at Ser9 in the ischemic zone compared with vehicle (181±20, 178±15 vs. 75±17 DU, resp.; P<0.05), and this effect was abrogated by prior administration of wortmannin or rapamycin in MOR-treated rats. Furthermore, no differences were seen in phosphorylation of GSKα (Ser21 or Tyr279) or phosphorylation of GSKβ (Tyr216). These data indicate that OIC occurs via the phosphorylation of GSKβ at Ser9 during reperfusion.

IT **280744-09-4**, SB216763
RL: PAC (Pharmacological activity); BIOL (Biological study)
(opioid-induced cardioprotection mediation by GSK-β at Ser9 during reperfusion)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

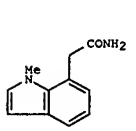
L6 ANSWER 27 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



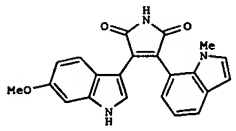
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 28 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

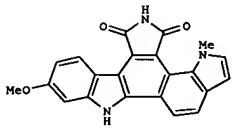
ACCESSION NUMBER: 2004:261266 CAPLUS
DOCUMENT NUMBER: 141:7051
TITLE: Synthetic Approaches to Indolo[6,7-a]pyrrolo[3,4-c]carbazoles: Potent Cyclin D1/CDK4 Inhibitors
AUTHOR(S): Faul, Margaret M.; Engler, Thomas A.; Sullivan, Kevin A.; Grutsch, John L.; Clayton, Marcella T.; Martinelli, Michael J.; Pawlak, Joseph M.; LeTourneau, Michael; Coffey, D. Scott; Pedersen, Steven W.; Kolis, Stanley P.; Furness, Kelly; Malhotra, Sushant; Al-Awar, Rima S.; Ray, James E.
CORPORATE SOURCE: Global Chemical Process Research and Development, Indianapolis, IN, 46285, USA
SOURCE: Journal of Organic Chemistry (2004), 69(9), 2967-2975
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 141:7051
GI



I



II



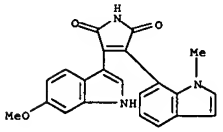
III

AB Synthesis of indolo[6,7-a]pyrrolo[3,4-c]carbazoles, a new class of cyclin D1/CDK4 inhibitors, by oxidation of the corresponding aryl (indolyl)maleimides, are described. Two approaches to the synthesis of (indolyl)maleimides were identified that required new methods for the synthesis of 7-substituted indoleacetamides and N-methyl(7-indolyl)oxoacetates. The chemical developed enabled introduction of functionality (-OR, NR2) at C12 and N13 facilitating structure-activity relationship (SAR) evaluation of this indolocarbazole platform. Biol. test data for the compds. prepared for this study were not reported. The reaction of 1-methyl-1H-indole-7-acetamide (I) with 6-methoxy-α-oxo-1H-indole-3-acetic acid Me ester gave 3-(6-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-1H-pyrrole-2,5-dione (II). Further photochem. cyclization of II gave 9-methoxy-3-methyl-3H-indolo[6,7-a]pyrrolo[3,4-c]carbazole-4,6(5H,11H)-dione (III).

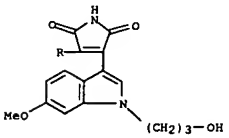
L6 ANSWER 28 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

IT **408354-39-2P**, 3-(6-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione **408354-72-3P**, 3-[1-(3-Hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione **408355-60-2P**, 3-[1-(3-Bromopropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione **408355-82-8P**, 3-[7-(2-Bromoethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione **408355-83-9P**, 3-[7-(2-Hydroxyethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of indolo[6,7-a]pyrrolo[3,4-c]carbazoles (cyclin D1/CDK4 protein kinase inhibitors))

RN 408354-39-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

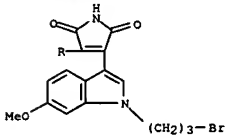


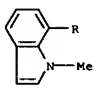
RN 408354-72-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



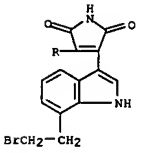
RN 408355-60-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-bromopropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

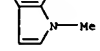
L6 ANSWER 28 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)





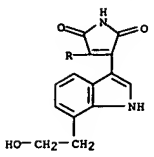
RN 408355-82-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(2-bromoethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

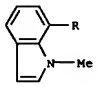




RN 408355-83-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(2-hydroxyethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 28 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)





REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

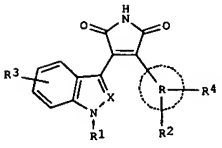
ACCESSION NUMBER: 2003:991343 CAPLUS
DOCUMENT NUMBER: 140:42028
TITLE: Preparation of substituted 1H-pyrrole-2,5-diones as kinase inhibitors
INVENTOR(S): Zhang, Han-cheng; Maryanoff, Bruce E.; Mccomsey, David
F.; White, Kimberly; Ye, Hong; Hecker, Leonard; Conway, Bruce R.; Demarest, Keith
PATENT ASSIGNEE(S): Janssen Pharmaceutica N.V., Belg.
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003103663	A2	20031218	WO 2003-US17518	20030604
WO 2003103663	A3	20040708		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2488798	AA	20031218	CA 2003-2488798	20030604
AU 2003240517	A1	20031222	AU 2003-240517	20030604
US 2004054180	A1	20040318	US 2003-454561	20030604
EP 1513520	A2	20050316	EP 2003-731528	20030604
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005531607	T2	20051020	JP 2004-510782	20030604

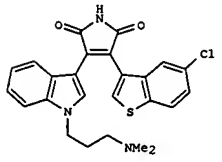
PRIORITY APPLN. INFO.:
US 2002-386002P P 20020605
WO 2003-US17518 W 20030604

OTHER SOURCE(S): MARPAT 140:42028
GI

L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



I



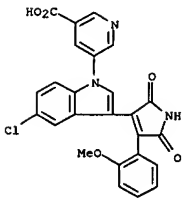
II

AB The title compds. [I; R = Ph, naphthyl, furyl, thienyl, etc.; R1 = H, (un)substituted alkyl, alkenyl, aryl, etc.; R2 = H, (un)substituted alkyl, alkenyl, CONH2, etc.; R3 = H, CHO, CONH2, CO2H, etc.; R4 = H, (un)substituted alkyl, CHO, CO2H, etc.; X = N, CR11; R11 = H, halo, (un)substituted alkyl, aryl, etc.], useful as protein kinase C or glycogen synthase kinase-3β inhibitors, were prepared E.g., a multi-step synthesis of II [starting from (5-chlorobenzo[b]thien-3-yl)acetic acid, and 2-(3-indolyl)-2-oxoacetic acid) which showed IC50 of 0.081 μM and 0.083 μM against PKC β-II and PKC α, resp., was given. The pharmaceutical composition comprising the compound I is claimed.

IT **634604-97-0P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of substituted 1H-pyrrole-2,5-diones as kinase inhibitors)

RN 634604-97-0 CAPLUS
CN 3-Pyridinecarboxylic acid, 5-[5-chloro-3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]- (9CI) (CA INDEX NAME)

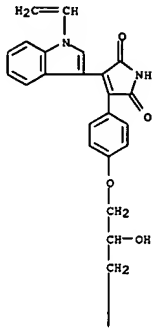
L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT **634604-61-8P 634604-62-9P 634604-64-1P**
634604-66-3P 634604-68-5P 634604-69-6P
634604-70-9P 634604-72-1P 634604-73-2P
634604-75-4P 634604-77-6P 634604-79-8P
634604-81-2P 634604-83-4P 634604-85-6P
634604-87-8P 634604-89-0P 634604-91-4P
634604-92-5P 634604-93-6P 634604-96-9P
634604-98-1P 634604-99-2P 634605-00-8P
634605-01-9P 634605-02-0P 634605-03-1P
634605-04-2P 634605-05-3P 634605-33-7P
634605-34-8P 634605-35-9P 634605-36-0P
634605-41-7P 634605-47-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of substituted 1H-pyrrole-2,5-diones as kinase inhibitors)

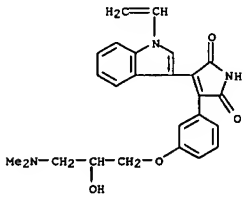
RN 634604-61-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-ethenyl-1H-indol-3-yl)-4-[4-[2-hydroxy-3-(1-piperidinyl)propoxy]phenyl]- (9CI) (CA INDEX NAME)

PAGE 1-A

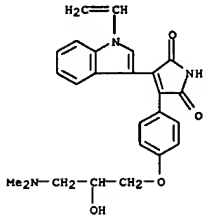


PAGE 2-A

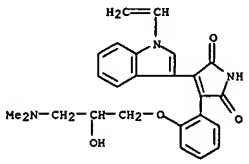
RN 634604-62-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[3-(dimethylamino)-2-hydroxypropoxy]phenyl]-4-(1-ethenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



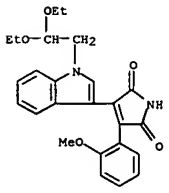
RN 634604-64-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[3-(dimethylamino)-2-hydroxypropoxy]phenyl]-4-(1-ethenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



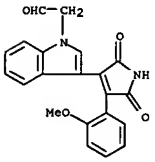
RN 634604-66-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[3-(dimethylamino)-2-hydroxypropoxy]phenyl]-4-(1-ethenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



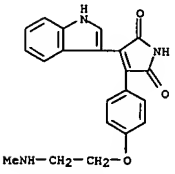
RN 634604-68-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(2,2-diethoxyethyl)-1H-indol-3-yl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)



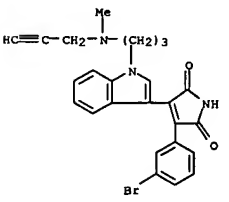
RN 634604-69-6 CAPLUS
CN 1H-Indole-1-acetaldehyde, 3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrrol-3-yl]- (9CI) (CA INDEX NAME)



RN 634604-70-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[4-[2-(methylamino)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

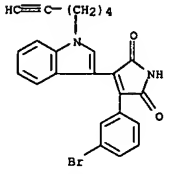


RN 634604-72-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-bromophenyl)-4-[1-[3-(methyl-2-propynylamino)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

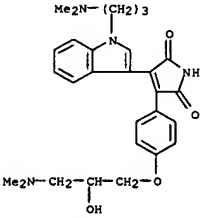


RN 634604-73-2 CAPLUS

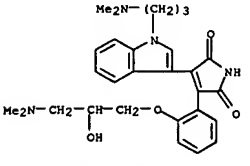
CN 1H-Pyrrole-2,5-dione, 3-(3-bromophenyl)-4-[1-(5-hexynyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 634604-75-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[3-(dimethylamino)-2-hydroxypropoxy]phenyl]-4-[1-[3-(dimethylamino)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

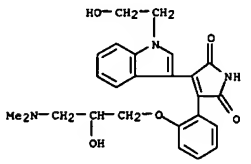


RN 634604-77-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[3-(dimethylamino)-2-hydroxypropoxy]phenyl]-4-[1-[3-(dimethylamino)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

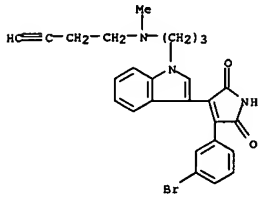


RN 634604-79-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[3-(dimethylamino)-2-hydroxypropoxy]phenyl]-4-

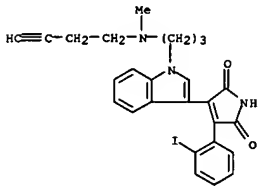
[1-(2-hydroxyethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



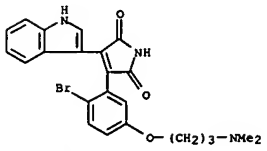
RN 634604-81-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-bromophenyl)-4-[1-[3-(3-butynylmethylamino)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



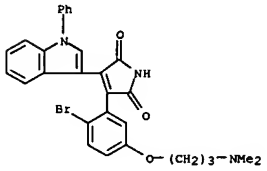
RN 634604-83-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-[3-(3-butynylmethylamino)propyl]-1H-indol-3-yl]-4-(2-iodophenyl)- (9CI) (CA INDEX NAME)



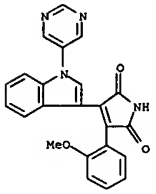
RN 634604-85-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-bromo-5-[3-(dimethylamino)propoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



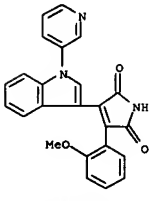
RN 634604-87-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-bromo-5-[3-(dimethylamino)propoxy]phenyl]-4-(1-phenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



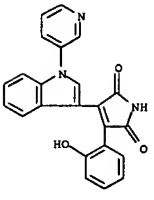
RN 634604-89-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-methoxyphenyl)-4-[1-(5-pyrimidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



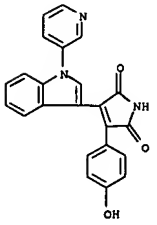
RN 634604-91-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-methoxyphenyl)-4-[1-(3-pyridinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 634604-92-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-hydroxyphenyl)-4-[1-(3-pyridinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

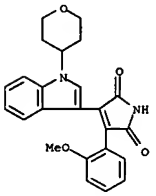


RN 634604-93-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-hydroxyphenyl)-4-[1-(3-pyridinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

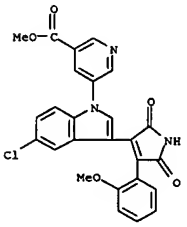


RN 634604-96-9 CAPLUS

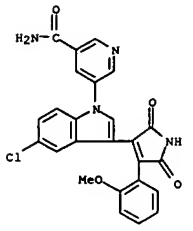
CN 1H-Pyrrole-2,5-dione, 3-(2-methoxyphenyl)-4-[1-(tetrahydro-2H-pyran-4-yl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



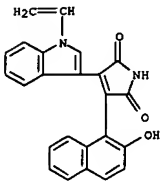
RN 634604-98-1 CAPLUS
CN 3-Pyridinecarboxylic acid, 5-[5-chloro-3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, methyl ester (9CI) (CA INDEX NAME)



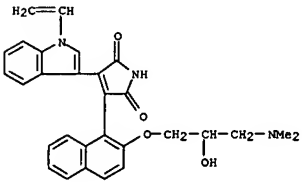
RN 634604-99-2 CAPLUS
CN 3-Pyridinecarboxamide, 5-[5-chloro-3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]- (9CI) (CA INDEX NAME)



RN 634605-00-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-ethenyl-1H-indol-3-yl)-4-(2-hydroxy-1-naphthalenyl)- (9CI) (CA INDEX NAME)

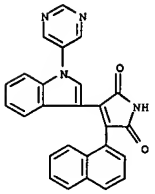


RN 634605-01-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[3-(dimethylamino)-2-hydroxypropoxy]-1-naphthalenyl]-4-(1-ethenyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

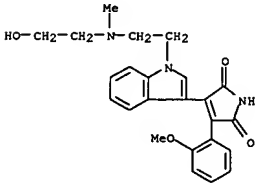


RN 634605-02-0 CAPLUS

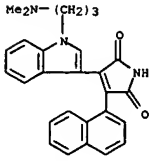
CN 1H-Pyrrole-2,5-dione, 3-(1-naphthalenyl)-4-[1-(5-pyrimidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 634605-33-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[2-[(2-hydroxyethyl)methylamino]ethyl]-1H-indol-3-yl]-4-(2-methoxyphenyl)- (9CI) (CA INDEX NAME)

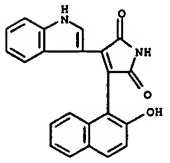


RN 634605-34-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[3-(dimethylamino)propyl]-1H-indol-3-yl]-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

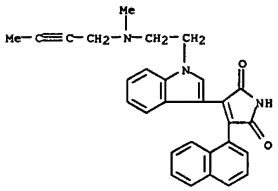


RN 634605-35-9 CAPLUS

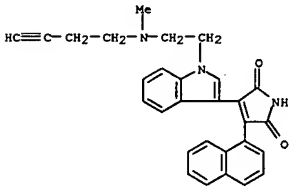
CN 1H-Pyrrole-2,5-dione, 3-(2-hydroxy-1-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 634605-03-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[2-(2-butynylmethylamino)ethyl]-1H-indol-3-yl]-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

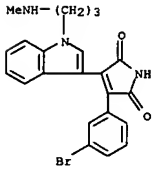


RN 634605-04-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[2-(3-butynylmethylamino)ethyl]-1H-indol-3-yl]-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

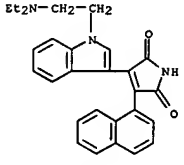


RN 634605-05-3 CAPLUS

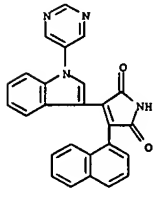
CN 1H-Pyrrole-2,5-dione, 3-(3-bromophenyl)-4-[1-[3-(methylamino)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 634605-36-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[2-(diethylamino)ethyl]-1H-indol-3-yl]-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



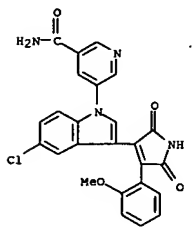
RN 634605-41-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-naphthalenyl)-4-[1-(5-pyrimidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L6 ANSWER 29 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 634605-47-3 CAPLUS
CN 3-Pyridinecarboxamide, 5-(5-chloro-3-[2,5-dihydro-4-(2-methoxyphenyl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

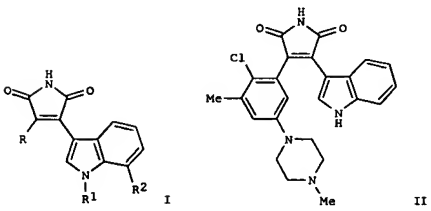
ACCESSION NUMBER: 2003:796695 CAPLUS
DOCUMENT NUMBER: 139:307678
TITLE: Preparation of indolylmaleimides for treating diseases or disorders mediated by T lymphocytes and/or PKC
INVENTOR(S): Evenou, Jean-Pierre; Von Matt, Peter; Wagner, Juergen; Zenke, Gerhard
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003082859	A1	20031009	WO 2003-EP3470	20030402
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SE, SG, SK, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR				
CA 2477774	AA	20031009	CA 2003-2477774	20030402
AU 2003224031	A1	20031013	AU 2003-224031	20030402
EP 1490355	A1	20041229	EP 2003-720413	20030402
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003008979	A	20050104	BR 2003-8979	20030402
US 2005119274	A1	20050602	US 2003-510027	20030402
JP 2005527563	T2	20050915	JP 2003-580325	20030402
NO 2004004613	A	20041026	NO 2004-4613	20041026

PRIORITY APPLN. INFO.:
GB 2002-7729 A 20020403
GB 2003-3323 A 20030213
WO 2003-EP3470 W 20030402

OTHER SOURCE(S): MARPAT 139:307678
GI

L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



I

II

AB The title compds. [I; R1 = H, Me, Et, iso-Pr; R2 = H, halo, alkoxy, alkyl; R = substituted Ph, 1-naphthyl, 4-pyrimidinyl, 4-quinolinyl, 1-isoquinolinyl] which are useful in the treatment and/or prevention of diseases or disorders mediated by T lymphocytes and/or PKC, e.g. acute or chronic rejection of organ or tissue allo- or xenografts, graft vs. host diseases, atherosclerosis, vascular occlusion due to vascular injury such as angioplasty, restenosis, obesity, syndrome X, impaired glucose tolerance, polycystic ovary syndrome, hypertension, heart failure, chronic obstructive pulmonary disease, CNS diseases such as Alzheimer disease or amyotrophic lateral sclerosis, cancer; infectious diseases such as AIDS, septic shock or adult respiratory distress syndrome, ischemia/reperfusion injury e.g. myocardial infraction, stroke, gut ischemia, renal failure or hemorrhage shock, or traumatic shock, e.g. traumatic brain injury, were prepared The compds. I are also useful in the treatment and/or prevention of T-cell mediated acute or chronic inflammatory diseases or disorders or autoimmune diseases e.g. rheumatoid arthritis, osteoarthritis, systemic lupus erythematosus, Hashimoto's thyroiditis, multiple sclerosis, myasthenia gravis, diabetes type I or II and the disorders associated therewith, e.g. angiopathy, diabetic proliferative retinopathy, diabetic macular edema, nephropathy, neuropathy and dawn phenomenon, respiratory diseases such as asthma or inflammatory lung injury, inflammatory liver injury, inflammatory glomerular injury, cutaneous manifestations of immunol.-mediated disorders or illnesses, inflammatory and hyperproliferative skin diseases (such as psoriasis, atopic dermatitis, allergic contact dermatitis, irritant contact dermatitis and further eczematous dermatitises, seborrheic dermatitis), inflammatory eye diseases, e.g., Sjoegren's syndrome, keratoconjunctivitis or uveitis, inflammatory bowel disease, Crohn's disease or ulcerative colitis. Thus, reacting 2-[2-chloro-3-methyl-5-(4-methylpiperazin-1-yl)phenyl]acetamide (preparation given) with 3-indoleglyoxylate in the presence of tert-BuOK in THF afforded II. The compds. I showed IC50 of ≤ 1 μM against different isoforms of PKC. Pharmaceutical composition comprising the compound I is claimed.

IT **611234-11-8P 611234-12-9P 611234-13-0P**
611234-14-1P 611234-15-2P 611234-16-3P
611234-17-4P 611234-19-6P 611234-20-9P
611234-21-0P 611234-22-1P 611234-23-2P

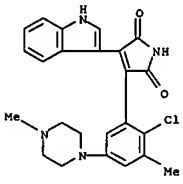
L6 ANSWER 30 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

611234-24-3P 611234-25-4P 611234-26-5P
611234-27-6P 611234-28-7P 611234-29-8P
611234-30-1P 611234-31-2P 611234-32-3P
611234-33-4P 611234-34-5P 611234-35-6P
611234-36-7P 611234-37-8P 611234-38-9P
611234-40-3P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of indolylmaleimides for treating diseases or disorders mediated by T lymphocytes and/or PKC)

RN 611234-11-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)-, monoacetate (9CI) (CA INDEX NAME)

CM 1

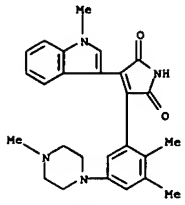
CRN 611234-10-7
CMF C24 H23 Cl N4 O2



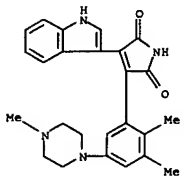
CM 2

CRN 64-19-7
CMF C2 H4 O2

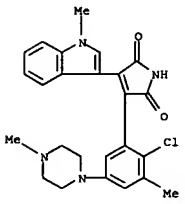
RN 611234-12-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2,3-dimethyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



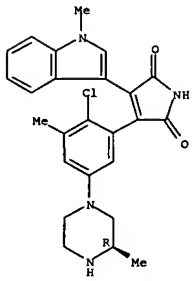
RN 611234-13-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2,3-dimethyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-14-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

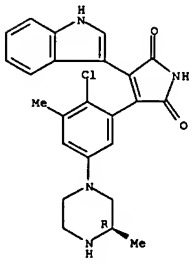


RN 611234-15-2 CAPLUS



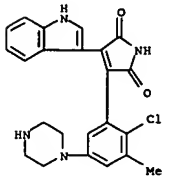
RN 611234-19-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-[(3R)-3-methyl-1-piperazinyl]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

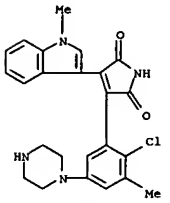


RN 611234-20-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-5-(1-piperazinyl)-3-(trifluoromethyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

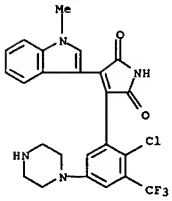


RN 611234-16-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

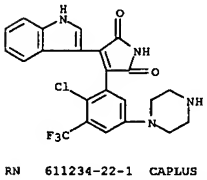


RN 611234-17-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-[(3R)-3-methyl-1-piperazinyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

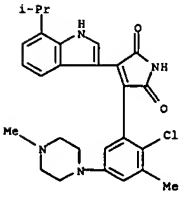
Absolute stereochemistry.



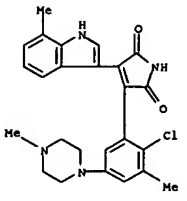
RN 611234-21-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-5-(1-piperazinyl)-3-(trifluoromethyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



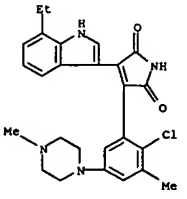
RN 611234-22-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-[7-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



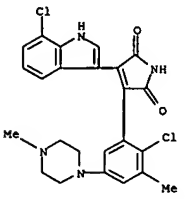
RN 611234-23-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



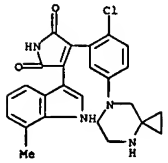
RN 611234-24-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-ethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



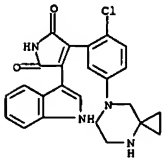
RN 611234-25-4 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(7-chloro-1H-indol-3-yl)-4-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



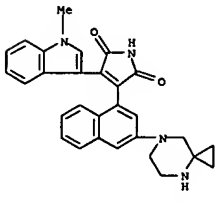
CN 1H-Pyrrole-2,5-dione,
3-[2-chloro-5-(4,7-diazaspiro[2.5]oct-7-yl)phenyl]-4-(7-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-30-1 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-chloro-5-(4,7-diazaspiro[2.5]oct-7-yl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

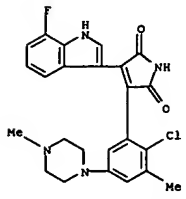


RN 611234-31-2 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-(4,7-diazaspiro[2.5]oct-7-yl)-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

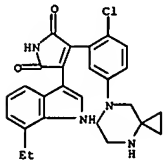


RN 611234-32-3 CAPLUS

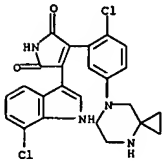
RN 611234-26-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-3-methyl-5-(4-methyl-1-piperazinyl)phenyl]-4-(7-fluoro-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-27-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-chloro-5-(4,7-diazaspiro[2.5]oct-7-yl)phenyl]-4-(7-ethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 611234-28-7 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-chloro-5-(4,7-diazaspiro[2.5]oct-7-yl)phenyl]-4-(7-chloro-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

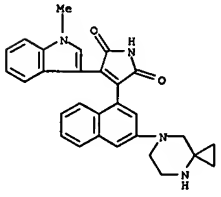


RN 611234-29-8 CAPLUS

CN 1H-Pyrrole-2,5-dione,
3-[3-(4,7-diazaspiro[2.5]oct-7-yl)-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)-, mono(trifluoroacetate) (9CI) (CA INDEX NAME)

CM 1

CRN 611234-31-2
CMF C29 H26 N4 O2

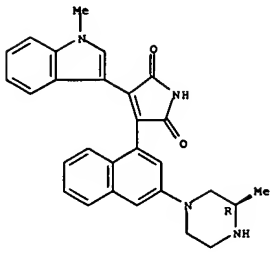


CM 2

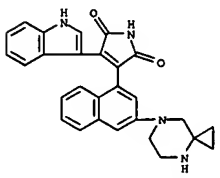
CRN 76-05-1
CMF C2 H F3 O2

RN 611234-33-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-[(3R)-3-methyl-1-piperazinyl]-1-naphthalenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

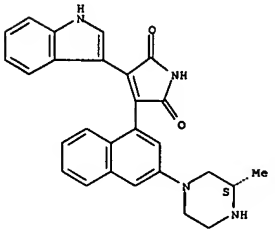


RN 611234-34-5 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-(4,7-diazaspiro[2.5]oct-7-yl)-1-naphthalenyl]-4-
(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



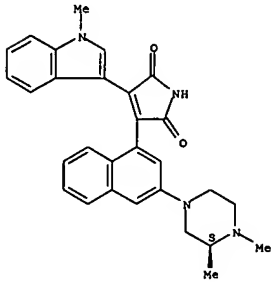
RN 611234-35-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(1H-indol-3-yl)-4-[3-[(3R)-3-methyl-1-piperazinyl]-
1-naphthalenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



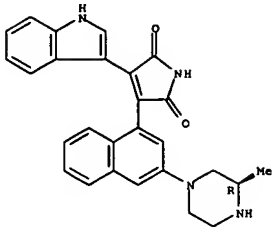
RN 611234-38-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(3S)-3,4-dimethyl-1-piperazinyl]-1-
naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



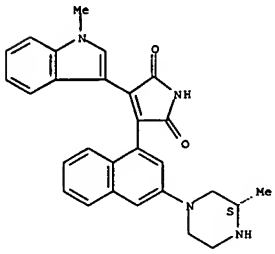
RN 611234-40-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(3S)-3,4-dimethyl-1-piperazinyl]-1-
naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



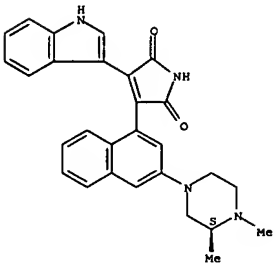
RN 611234-36-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-[(3S)-3-methyl-1-
piperazinyl]-1-naphthalenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 611234-37-8 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(1H-indol-3-yl)-4-[3-[(3S)-3-methyl-1-piperazinyl]-
1-naphthalenyl]- (9CI) (CA INDEX NAME)

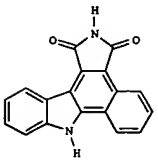
Absolute stereochemistry.



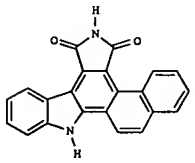
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L6 ANSWER 31 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:795114 CAPLUS
DOCUMENT NUMBER: 140:42054
TITLE: Aryl[a]pyrrolo[3,4-c]carbazoles as selective cyclin D1-CDK4 inhibitors
AUTHOR(S): Sanchez-Martinez, Concha; Shih, Chuan; Faul, Margaret M.; Zhu, Guoxin; Paal, Michael; Somoza, Carmen; Li, Tiechao; Kumrich, Christine A.; Winneroski, Leonard L.; Xun, Zhou; Brooks, Harold B.; Patel, Bharvin K. R.; Schultz, Richard M.; DeHahn, Tammy B.; Spencer, Charles D.; Watkins, Scott A.; Considine, Eileen; Dempsey, Jack A.; Ogg, Catherine A.; Campbell, Robert M.; Anderson, Bryan A.; Wagner, Jill
CORPORATE SOURCE: DCR&T, Lilly Spain S.A., Madrid, 28108, Spain
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(21), 3835-3839
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:42054
GI



I



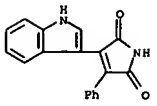
II

AB The synthesis of analogs of Arcyriaflavin A, in which one indole ring is replaced by an aryl or heteroaryl ring, is described. These series of aryl[a]pyrrolo[3,4-c]carbazoles, e.g., I, were evaluated as inhibitors of Cyclin D1-CDK4. A potent and selective D1-CDK4 inhibitor, II (D1-CDK4 IC50 = 45 nM), has been identified. The potency, selectivity profile against other kinases, and structure-activity relationship (SAR) trends of this class of compds. are discussed.

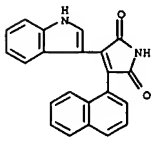
IT **125313-57-7P 221233-51-8P 610312-74-8P 635300-91-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of maleimides via heterocyclization of indolylglyoxylate with arylacetamides followed by elimination in the preparation of arenopyrrolocarbazoles as cyclin D1-CDK4 inhibitors)

RN 125313-57-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

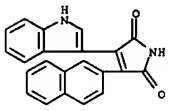
L6 ANSWER 31 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



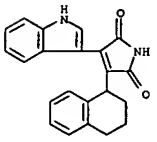
RN 221233-51-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 610312-74-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 635300-91-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1,2,3,4-tetrahydro-1-naphthalenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

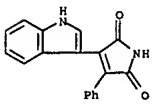
L6 ANSWER 31 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L6 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:743245 CAPLUS
DOCUMENT NUMBER: 139:307698
TITLE: Synthesis of Aryl- and Heteroaryl[a]pyrrolo[3,4-c]carbazoles
AUTHOR(S): Sanchez-Martinez, Concha; Faul, Margaret M.; Shih, Chuan; Sullivan, Kevin A.; Grutsch, John L.; Cooper, Jeremy T.; Kolis, Stanley P.
CORPORATE SOURCE: Lilly S.A., Alcobendas, 28108, Spain
SOURCE: Journal of Organic Chemistry (2003), 68(21), 8008-8014
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:307698

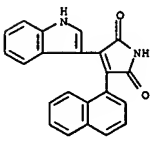
AB Synthesis of aryl- and hetero[a]pyrrolo[3,4-c]carbazoles by photochem. oxidation and Heck cyclization are described. Photochem. oxidation of 2-naphthyl indolyl maleimide affords two different carbazole regioisomers, depending on the reaction conditions. The regiochem. of the cyclization can be controlled using the Heck reaction.

IT **125313-57-7P 221233-51-8P 610312-74-8P 610312-78-2P 610312-79-3P 610312-80-6P 610312-81-7P 610312-82-8P 610312-83-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of aryl- and hetero[a]pyrrolo[3,4-c]carbazoles by photochem. oxidation and Heck cyclization)

RN 125313-57-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

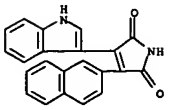


RN 221233-51-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

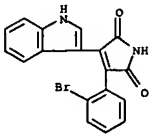


RN 610312-74-8 CAPLUS

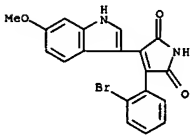
L6 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 610312-78-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-bromophenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

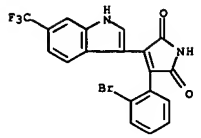


RN 610312-79-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-bromophenyl)-4-(6-methoxy-1H-indol-3-yl)-(9CI)
(CA INDEX NAME)

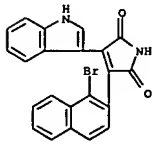


RN 610312-80-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-bromophenyl)-4-[6-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

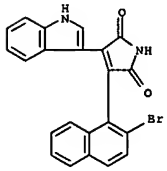
L6 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 610312-81-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-bromo-2-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

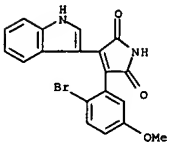


RN 610312-82-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-bromo-1-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 610312-83-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-bromo-5-methoxyphenyl)-4-(1H-indol-3-yl)-(9CI)
(CA INDEX NAME)

L6 ANSWER 32 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



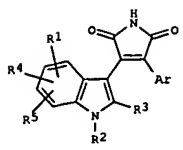
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 33 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:737721 CAPLUS
DOCUMENT NUMBER: 139:276815
TITLE: Preparation of 3-(indol-3-yl) 4-heteroaryl substituted pyrrole-2,5-diones as GSK-3β inhibitors
INVENTOR(S): Albaugh, Pamela Ann; Ammenn, Jochen; Burkholder, Timothy Paul; Clayton, Joshua Ryan; Conner, Scott Eugene; Cunningham, Brian Eugene; Engler, Thomas Albert; Furness, Kelly Wayne; Henry, James Robert; Li, Yihong; Malhotra, Sushant; Tebbe, Mark Joseph; Zhu, Guoxin
PATENT ASSIGNEE(S): Eli Lilly and Company, USA; et al.
SOURCE: PCT Int. Appl., 88 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003076398	A2	20030918	WO 2003-US5052	20030305
WO 2003076398	A3	20040226		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2477984	AA	20030918	CA 2003-2477984	20030305
AU 2003217596	A1	20030922	AU 2003-217596	20030305
EP 1487822	A2	20041222	EP 2003-713551	20030305
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005530707	T2	20051013	JP 2003-574619	20030305
US 2005288321	A1	20051229	US 2005-506029	20050519
PRIORITY APPLN. INFO.:			US 2002-363375P	P 20020308
			US 2002-369433P	P 20020402
			WO 2003-US5052	W 20030305

OTHER SOURCE(S): MARPAT 139:276815
GI



I

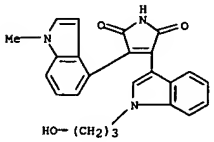
AB The title compds. [I; Ar = (un)substituted benzofuryl, indolyl, quinolinyl, etc.; R1 = H, alkoxy, halo, etc.; R2 = H, alkyl, (un)substituted piperidin-4(or 3)-yl, etc.; R3 = H, halo, alkyl, cyclopropyl; or R2 and R3 taken together = CH2CH2CH(CH2OH)CH2; R4, R5 = H, halo], useful for treating GSK-3β mediated diseases such as diabetes and Alzheimer's disease, were prepared Thus, reacting 2-[1-(3-hydroxypropyl)-1H-indol-3-yl]acetamide with Me (1-methyl-1H-indol-4-yl)oxoacetate in the presence of tert-BuOK in DMF afforded 54% I [Ar = 1-methyl-1H-indol-4-yl; R1, R3-R5 = H; R2 = 3-hydroxypropyl] which showed IC50 of 0.1757 μM against GSK-3β. Pharmaceutical composition comprising the compound I was claimed.

IT 604007-24-1P 604007-25-2P 604007-26-3P
604007-27-4P 604007-31-0P 604007-32-1P
604007-33-2P 604007-34-3P 604007-35-4P
604007-36-5P 604007-37-6P 604007-38-7P
604007-39-8P 604007-42-3P 604007-43-4P
604007-44-5P 604007-45-6P 604007-46-7P
604007-47-8P 604007-48-9P 604007-49-0P
604007-50-3P 604007-51-4P 604007-53-6P
604007-54-7P 604007-55-8P 604007-56-9P
604007-57-0P 604007-58-1P 604007-59-2P
604007-61-6P 604007-62-7P 604007-64-9P
604007-65-0P 604007-66-1P 604007-67-2P
604007-68-3P 604007-69-4P 604007-70-7P
604007-71-8P 604007-72-9P 604007-73-0P
604007-74-1P 604007-75-2P 604007-76-3P
604007-77-4P 604007-81-0P 604007-82-1P
604007-83-2P 604007-84-3P 604007-85-4P
604007-86-5P 604007-87-6P 604007-88-7P
604007-90-1P 604007-91-2P 604007-92-3P
604007-93-4P 604007-94-5P 604007-95-6P
604007-97-8P 604007-98-9P 604007-99-0P
604008-00-6P 604008-01-7P 604008-02-8P
604008-03-9P 604008-04-0P 604008-06-2P
604008-07-3P 604008-08-4P 604008-09-5P
604008-10-8P 604008-11-9P 604008-12-0P
604008-13-1P 604008-14-2P 604008-15-3P
604008-16-4P 604008-17-5P 604008-19-7P
604008-20-0P 604008-21-1P 604008-22-2P
604008-23-3P 604008-24-4P 604008-25-5P
604008-26-6P 604008-27-7P 604008-28-8P
604008-29-9P 604008-30-2P 604008-31-3P
604008-32-4P 604008-34-6P 604008-35-7P
604008-38-0P 604008-39-1P 604008-40-4P
604008-41-5P 604008-42-6P 604008-43-7P

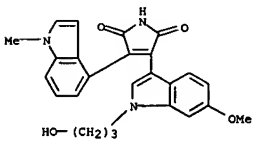
604008-44-8P 604008-45-9P 604008-46-0P
604008-47-1P 604008-48-2P 604008-49-3P
604008-50-6P 604008-52-8P 604008-53-9P
604008-54-0P 604008-55-1P 604008-56-2P
604008-57-3P 604008-58-4P 604008-60-8P
604008-61-9P 604008-62-0P 604008-63-1P
604008-64-2P 604008-65-3P 604008-66-4P
604008-67-5P 604008-68-6P 604008-69-7P
604008-70-0P 604008-71-1P 604008-72-2P
604008-73-3P 604008-74-4P 604008-75-5P
604008-76-6P 604008-77-7P 604008-78-8P
604008-79-9P 604008-80-2P 604008-81-3P
604008-82-4P 604008-85-7P 604008-86-8P
604008-88-0P 604008-91-5P 604008-92-6P
604008-93-7P 604008-94-8P 604008-95-9P
604008-96-0P 604010-42-6P 604010-61-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of 3-(indol-3-yl) 4-heteroaryl substituted pyrrole-2,5-diones as GSK-3β inhibitors)

RN 604007-24-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-4-yl)- (9CI) (CA INDEX NAME)

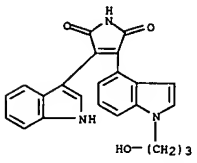


RN 604007-25-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-4-yl)- (9CI) (CA INDEX NAME)



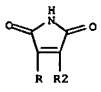
RN 604007-26-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-4-yl]-4-(1H-indol-3-

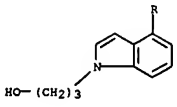
yl)- (9CI) (CA INDEX NAME)



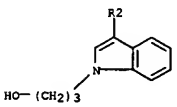
RN 604007-27-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-[1-(3-hydroxypropyl)-1H-indol-4-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

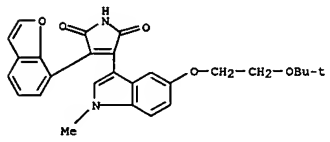




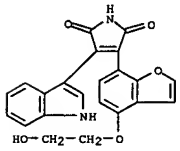
PAGE 2-A



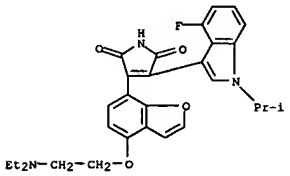
RN 604007-31-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-(1,1-dimethylethoxy)ethoxy]-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604007-32-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-(2-hydroxyethoxy)-7-benzofuranyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

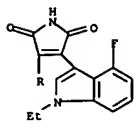


RN 604007-33-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[2-(diethylamino)ethoxy]-7-benzofuranyl]-4-[4-fluoro-1-(1-methylethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

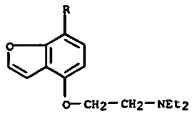


● HCl

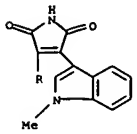
RN 604007-34-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[2-(diethylamino)ethoxy]-7-benzofuranyl]-4-(1-ethyl-4-fluoro-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

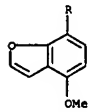


● HCl

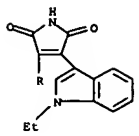


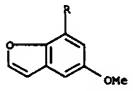
RN 604007-35-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxy-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



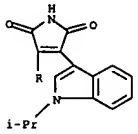


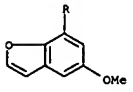
RN 604007-36-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-ethyl-1H-indol-3-yl)-4-(5-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



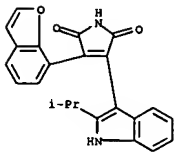


RN 604007-37-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-7-benzofuranyl)-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

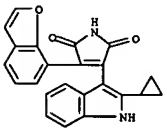




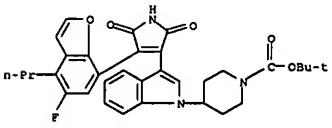
RN 604007-38-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[2-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



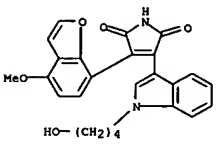
RN 604007-39-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-(2-cyclopropyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



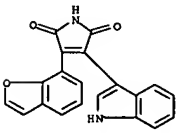
RN 604007-42-3 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[3-[4-(5-fluoro-4-propyl-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



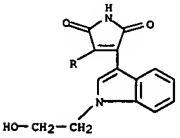
RN 604007-43-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(4-hydroxybutyl)-1H-indol-3-yl]-4-(4-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)

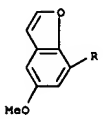


RN 604007-44-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



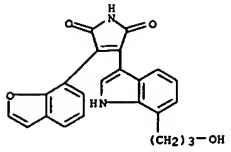
RN 604007-45-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(2-hydroxyethyl)-1H-indol-3-yl]-4-(5-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



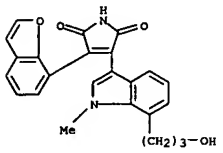


RN 604007-46-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-hydroxypropyl)-1H-indol-3-

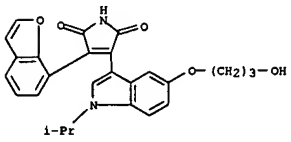
yl]- (9CI) (CA INDEX NAME)



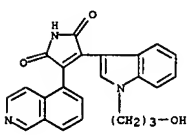
RN 604007-47-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-hydroxypropyl)-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



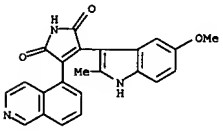
RN 604007-48-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-(3-hydroxypropoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



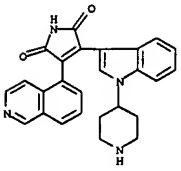
RN 604007-49-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-hydroxypropyl)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



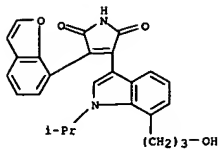
RN 604007-54-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-isoquinolinyl)-4-(5-methoxy-2-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



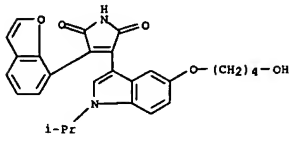
RN 604007-55-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-isoquinolinyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



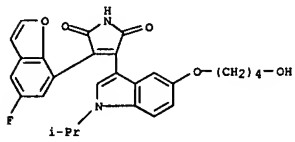
RN 604007-56-9 CAPLUS
CN Piperidine, 4-[3-[4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-[(tetrahydro-2H-pyran-4-yl)carbonyl]- (9CI) (CA INDEX NAME)



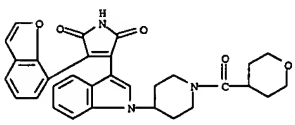
RN 604007-50-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-(4-hydroxybutoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



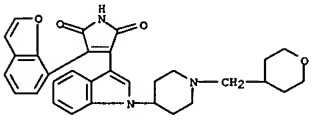
RN 604007-51-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-7-benzofuranyl)-4-[5-(4-hydroxybutoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604007-53-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(5-isoquinolinyl)- (9CI) (CA INDEX NAME)

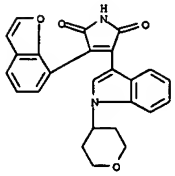


RN 604007-57-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-[1-[(tetrahydro-2H-pyran-4-yl)methyl]-4-piperidinyl]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

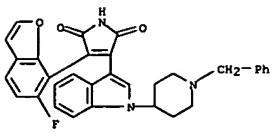


● HCl

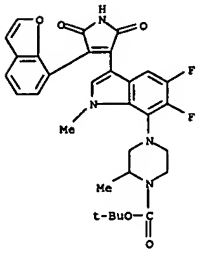
RN 604007-58-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(tetrahydro-2H-pyran-4-yl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



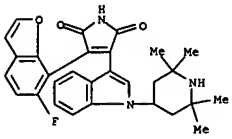
RN 604007-59-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-[1-(phenylmethyl)-4-piperidinyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604007-61-6 CAPLUS
CN 1-Piperazinecarboxylic acid, 4-[3-[4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-5,6-difluoro-1-methyl-1H-indol-7-yl]-2-methyl-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

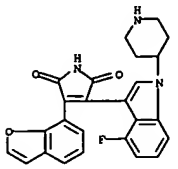


RN 604007-62-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(2,2,6,6-tetramethyl-4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



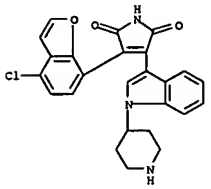
● HCl

RN 604007-64-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

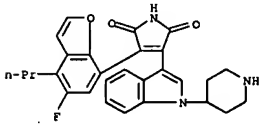


● HCl

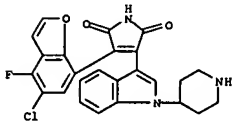
RN 604007-65-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-chloro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



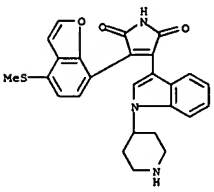
RN 604007-66-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-4-propyl-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



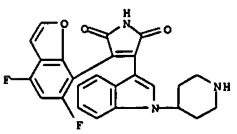
RN 604007-67-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-4-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



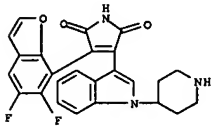
RN 604007-68-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-(methylthio)-7-benzofuranyl]-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604007-69-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4,6-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

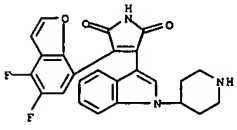


RN 604007-70-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5,6-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



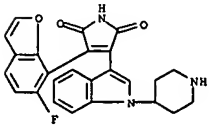
● HCl

RN 604007-71-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4,5-difluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

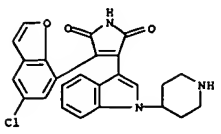
RN 604007-72-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

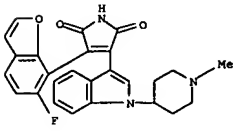
RN 604007-73-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-

indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



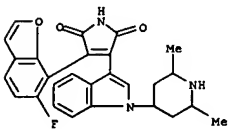
● HCl

RN 604007-74-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(1-methyl-4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

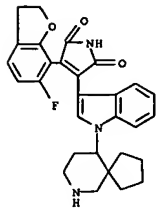
RN 604007-75-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(2,6-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

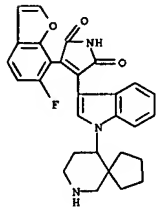
RN 604007-76-3 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[1-(7-azaspiro[4.5]dec-10-yl)-1H-indol-3-yl]-4-(6-

fluoro-2,3-dihydro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



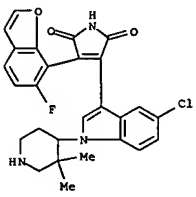
● HCl

RN 604007-77-4 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[1-(7-azaspiro[4.5]dec-10-yl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



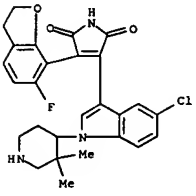
● HCl

RN 604007-81-0 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

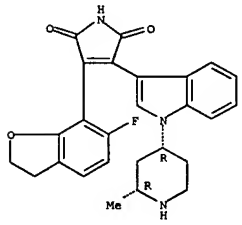
RN 604007-82-1 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[5-chloro-1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

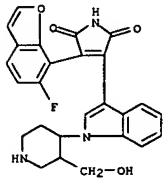
RN 604007-83-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-[(2R,4R)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



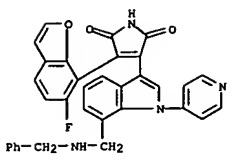
● HCl

RN 604007-84-3 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(6-fluoro-7-benzofuranyl)-4-[1-[3-(hydroxymethyl)-4-piperidinyl]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

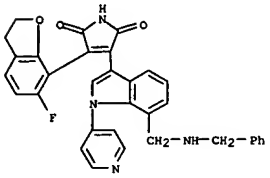


● HCl

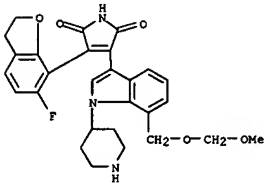
RN 604007-85-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[7-[[(phenylmethyl)amino]methyl]-1-(4-pyridinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



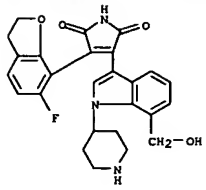
RN 604007-86-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-(7-[[(phenylmethyl)amino]methyl]-1-(4-pyridinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604007-87-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-(7-[(methoxymethoxy)methyl]-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

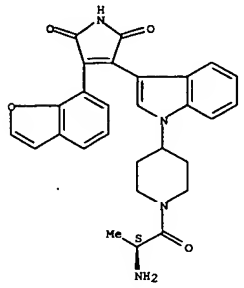


RN 604007-88-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[7-(hydroxymethyl)-1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

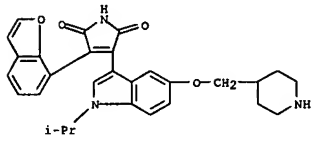


RN 604007-90-1 CAPLUS
CN Piperidine, 1-[(2S)-2-amino-1-oxopropyl]-4-[3-[4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]- (9CI) (CA INDEX NAME)

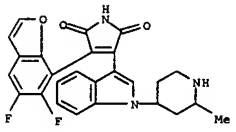
Absolute stereochemistry.



RN 604007-91-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(1-methylethyl)-5-(4-piperidinylmethoxy)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

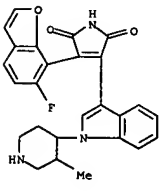


RN 604007-92-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5,6-difluoro-7-benzofuranyl)-4-[1-(2-methyl-4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

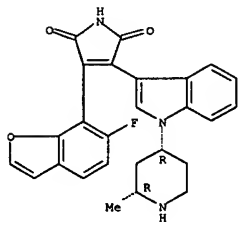
RN 604007-93-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(3-methyl-4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 604007-94-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-[(2R,4R)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

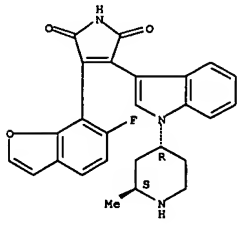
Relative stereochemistry.



● HCl

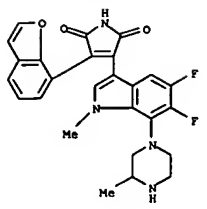
RN 604007-95-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-[(2R,4S)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



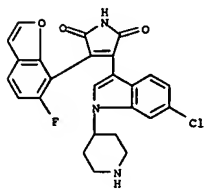
● HCl

RN 604007-97-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5,6-difluoro-1-methyl-7-(3-methyl-1-piperazinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



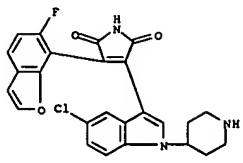
● HCl

RN 604007-98-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[6-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



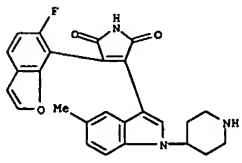
● HCl

RN 604007-99-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



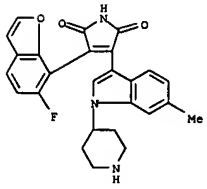
● HCl

RN 604008-00-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[5-methyl-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



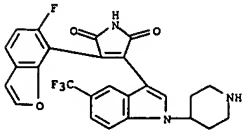
● HCl

RN 604008-01-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[6-methyl-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

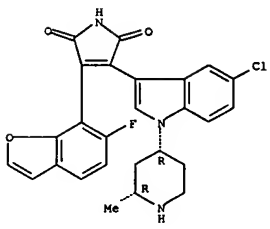
RN 604008-02-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-5-(trifluoromethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 604008-03-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-[(2R,4R)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

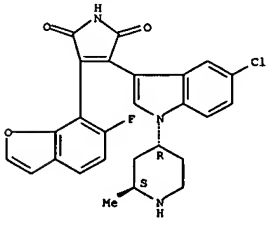
Relative stereochemistry.



● HCl

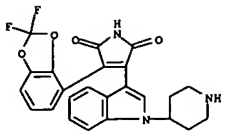
RN 604008-04-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-[(2R,4S)-2-methyl-4-piperidinyl]-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride, rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



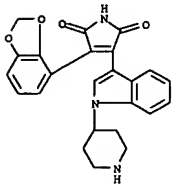
● HCl

RN 604008-06-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,2-difluoro-1,3-benzodioxol-4-yl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



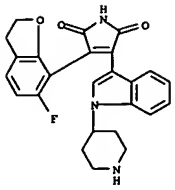
● HCl

RN 604008-07-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,3-benzodioxol-4-yl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



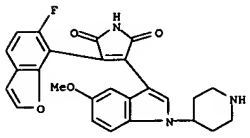
● HCl

RN 604008-08-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



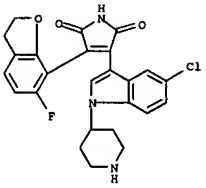
● HCl

RN 604008-09-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[5-methoxy-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



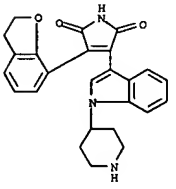
● HCl

RN 604008-10-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-chloro-1-(4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



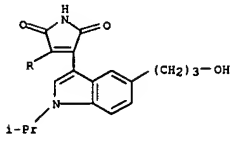
● HCl

RN 604008-11-9 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

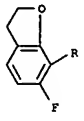


● HCl

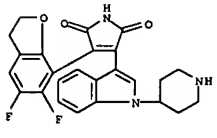
RN 604008-12-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[5-(3-hydroxypropyl)-1-(1-methylethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

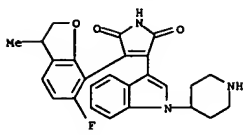


RN 604008-13-1 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(5,6-difluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



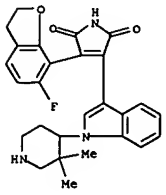
● HCl

RN 604008-14-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-3-methyl-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



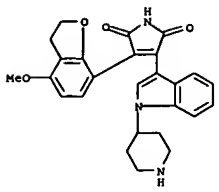
● HCl

RN 604008-15-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



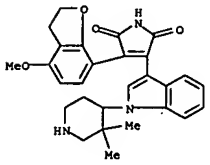
● HCl

RN 604008-16-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-4-methoxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



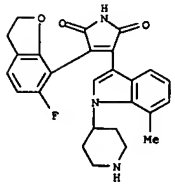
● HCl

RN 604008-17-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-4-methoxy-7-benzofuranyl)-4-[1-(3,3-dimethyl-4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



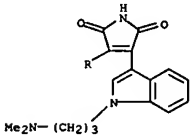
● HCl

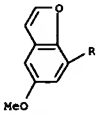
RN 604008-19-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[7-methyl-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



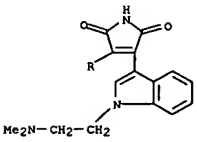
● HCl

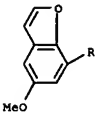
RN 604008-20-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[3-(dimethylamino)propyl]-1H-indol-3-yl]-4-(5-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



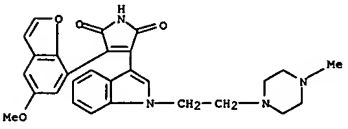


RN 604008-21-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[2-(dimethylamino)ethyl]-1H-indol-3-yl]-4-(5-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)

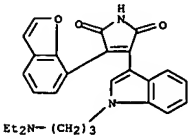




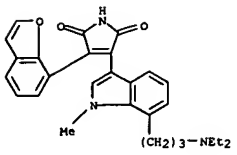
RN 604008-22-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-7-benzofuranyl)-4-[1-[2-(4-methyl-1-piperazinyl)ethyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



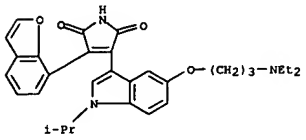
RN 604008-23-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-[3-(diethylamino)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



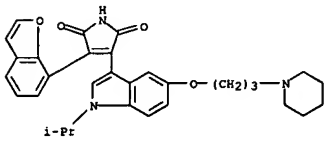
RN 604008-24-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-[3-(diethylamino)propyl]-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



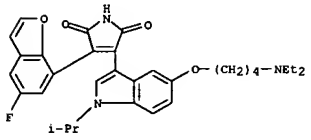
RN 604008-25-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[3-(diethylamino)propoxy]-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



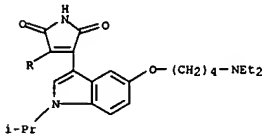
RN 604008-26-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(1-methylethyl)-5-[3-(1-piperidinyl)propoxy]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



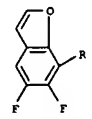
RN 604008-27-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[3-(4-hydroxy-1-piperidinyl)propoxy]-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



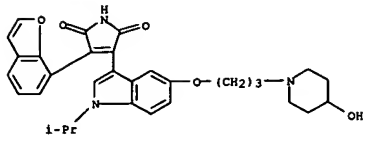
RN 604008-31-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-[4-(diethylamino)butoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5,6-difluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



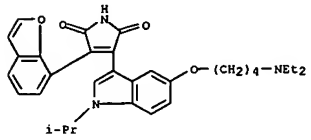
● HCl



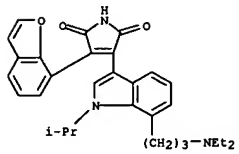
RN 604008-32-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-[4-(diethylamino)butoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)



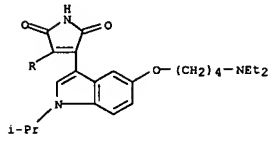
RN 604008-28-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[4-(diethylamino)butoxy]-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



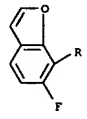
RN 604008-29-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-[3-(diethylamino)propyl]-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



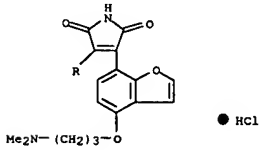
RN 604008-30-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-[4-(diethylamino)butoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)



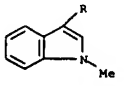
● HCl



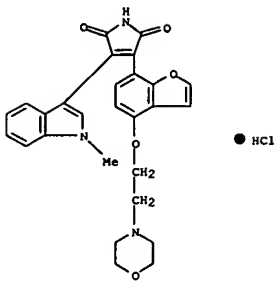
RN 604008-34-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[3-(dimethylamino)propoxy]-7-benzofuranyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

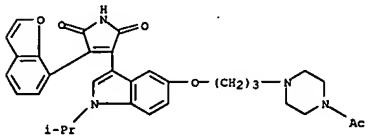


RN 604008-35-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[4-[2-(4-morpholinyl)ethoxy]-7-benzofuranyl]-, monohydrochloride (9CI) (CA INDEX NAME)



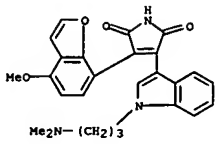
● HCl

RN 604008-38-0 CAPLUS
CN Piperazine, 1-acetyl-4-[3-[[3-[4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1-(1-methylethyl)-1H-indol-5-yl]oxy]propyl]-, monohydrochloride (9CI) (CA INDEX NAME)

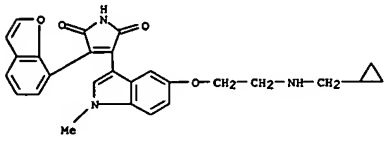


● HCl

RN 604008-39-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[3-(dimethylamino)propyl]-1H-indol-3-yl]-4-(4-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)

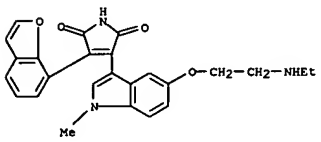


RN 604008-40-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-[(cyclopropylmethyl)amino]ethoxy]-1-methyl-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



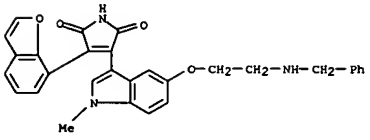
● HCl

RN 604008-41-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-(ethylamino)ethoxy]-1-methyl-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



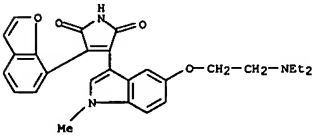
● HCl

RN 604008-42-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-methyl-5-[2-[(phenylmethyl)amino]ethoxy]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA



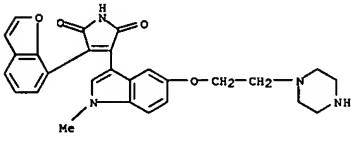
● HCl

RN 604008-43-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-[2-(diethylamino)ethoxy]-1-methyl-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



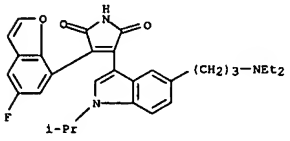
● HCl

RN 604008-44-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-methyl-5-[2-(1-piperazinyl)ethoxy]-1H-indol-3-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

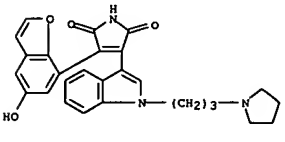


●2 HCl

RN 604008-45-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-[3-(diethylamino)propyl]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)

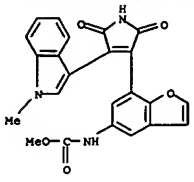


RN 604008-46-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-hydroxy-7-benzofuranyl)-4-[1-[3-(1-pyrrolidinyl)propyl]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

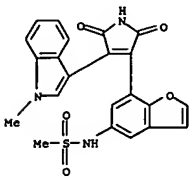


● HCl

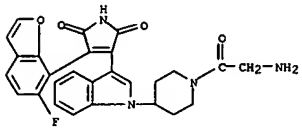
RN 604008-47-1 CAPLUS
CN Carbamic acid, [7-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-5-benzofuranyl]-, methyl ester (9CI) (CA INDEX NAME)



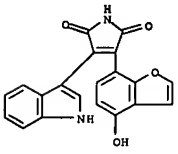
RN 604008-48-2 CAPLUS
CN Methanesulfonamide, N-[7-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-5-benzofuranyl]- (9CI) (CA INDEX NAME)



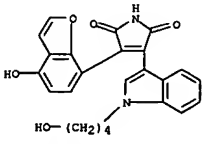
RN 604008-49-3 CAPLUS
CN Piperidine, 1-(aminoacetyl)-4-[3-[4-(6-fluoro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]- (9CI) (CA INDEX NAME)



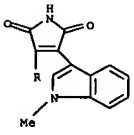
RN 604008-50-6 CAPLUS
CN Piperidine, 1-(2-amino-1-oxopropyl)-4-[3-[4-(6-fluoro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]- (9CI) (CA INDEX NAME)

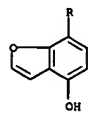


RN 604008-55-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-hydroxy-7-benzofuranyl)-4-[1-(4-hydroxybutyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

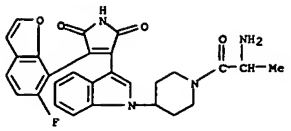


RN 604008-56-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-hydroxy-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

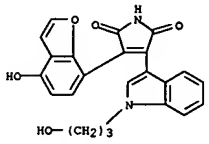




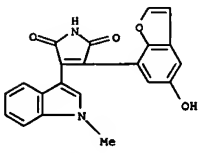
RN 604008-57-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-hydroxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-



RN 604008-52-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-hydroxy-7-benzofuranyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

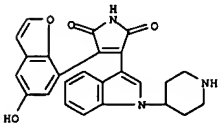


RN 604008-53-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-hydroxy-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

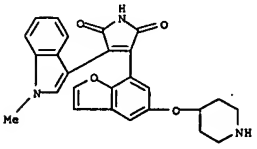


RN 604008-54-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-hydroxy-7-benzofuranyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

indol-3-yl]- (9CI) (CA INDEX NAME)

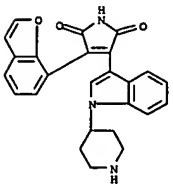


RN 604008-58-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[5-(4-piperidinyloxy)-7-benzofuranyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

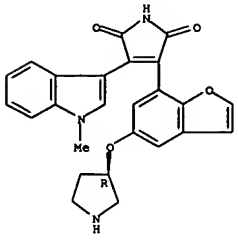
RN 604008-60-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604008-61-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[5-[(3R)-3-pyrrolidinyloxy]-7-benzofuranyl]-, monohydrochloride (9CI) (CA INDEX

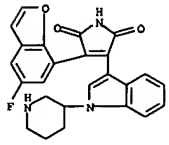
NAME)

Absolute stereochemistry.



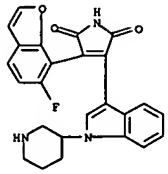
● HCl

RN 604008-62-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-7-benzofuranyl)-4-[1-(3-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



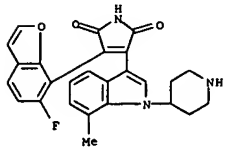
● HCl

RN 604008-63-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(3-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



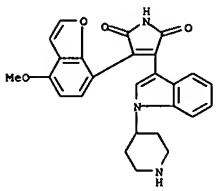
● HCl

RN 604008-64-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[7-methyl-1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

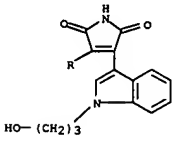


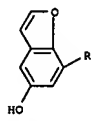
● HCl

RN 604008-65-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

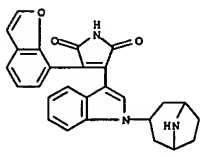


RN 604008-66-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-hydroxy-7-benzofuranyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



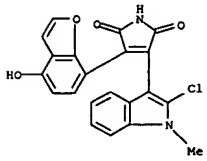


RN 604008-67-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-endo)-8-azabicyclo[3.2.1]oct-3-yl-1H-indol-3-yl]-4-(7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)

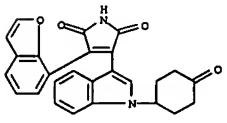


● HCl

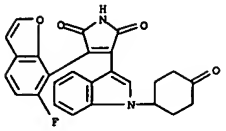
RN 604008-68-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chloro-1-methyl-1H-indol-3-yl)-4-(4-hydroxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



RN 604008-69-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(4-oxocyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

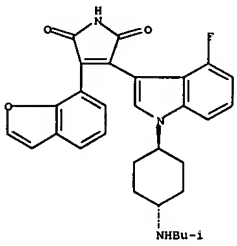


RN 604008-70-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(4-oxocyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604008-71-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-[trans-4-[(2-methylpropyl)amino]cyclohexyl]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

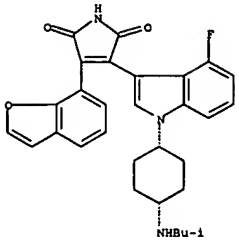
Relative stereochemistry.



● HCl

RN 604008-72-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-[cis-4-[(2-methylpropyl)amino]cyclohexyl]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

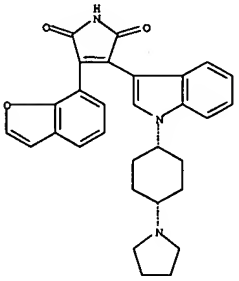
Relative stereochemistry.



● HCl

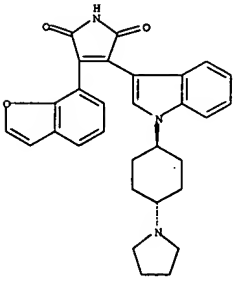
RN 604008-73-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-[cis-4-(1-pyrrolidinyl)cyclohexyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

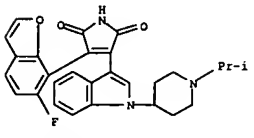


RN 604008-74-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-[trans-4-(1-pyrrolidinyl)cyclohexyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

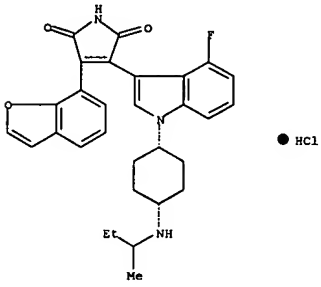


RN 604008-75-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-[1-(1-methylethyl)-4-piperidinyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



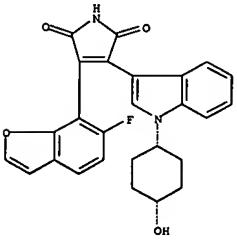
RN 604008-76-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-[cis-4-[(1-methylpropyl)amino]cyclohexyl]-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.

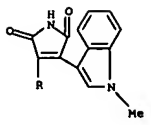


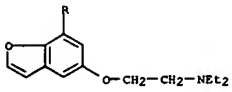
RN 604008-77-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(cis-4-hydroxycyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

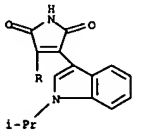


RN 604008-78-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-[2-(diethylamino)ethoxy]-7-benzofuranyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

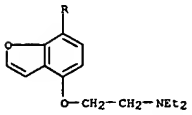




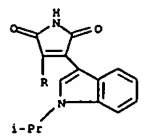
RN 604008-79-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[2-(diethylamino)ethoxy)-7-benzofuranyl]-4-[1-(1-methylethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



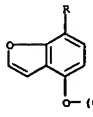
● HCl



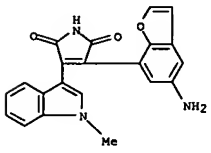
RN 604008-80-2 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[4-[3-(diethylamino)propoxy]-7-benzofuranyl]-4-[1-(1-methylethyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)



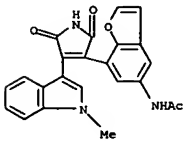
● HCl



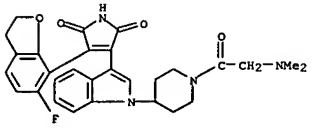
RN 604008-81-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-amino-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



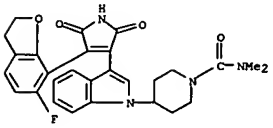
RN 604008-82-4 CAPLUS
CN Acetamide, N-[7-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl)-5-benzofuranyl]- (9CI) (CA INDEX NAME)



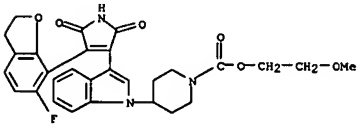
RN 604008-85-7 CAPLUS
CN Piperidine, 1-[(dimethylamino)acetyl]-4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]- (9CI)



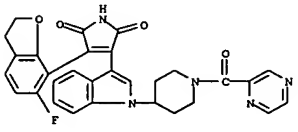
RN 604008-86-8 CAPLUS
CN 1-Piperidinecarboxamide,
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



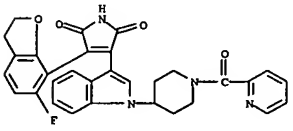
RN 604008-88-0 CAPLUS
CN 1-Piperidinecarboxylic acid,
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, 2-methoxyethyl ester (9CI) (CA INDEX NAME)



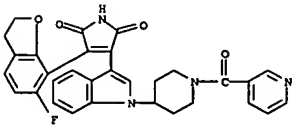
RN 604008-91-5 CAPLUS
CN Piperidine,
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(pyrazinylcarbonyl)- (9CI) (CA INDEX NAME)



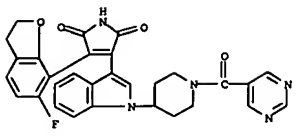
RN 604008-92-6 CAPLUS
CN Piperidine,
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(2-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)



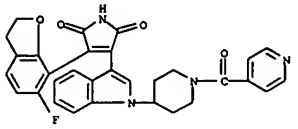
RN 604008-93-7 CAPLUS
CN Piperidine,
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(3-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)



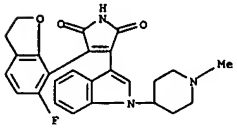
RN 604008-94-8 CAPLUS
CN Piperidine,
4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(5-pyrimidinylcarbonyl)- (9CI) (CA INDEX NAME)



RN 604008-95-9 CAPLUS
CN Piperidine, 4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-(4-pyridinylcarbonyl)- (9CI) (CA INDEX NAME)

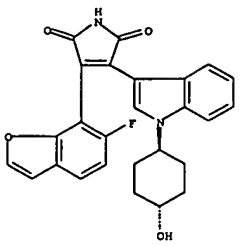


RN 604008-96-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(1-methyl-4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

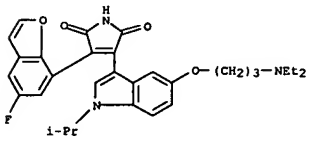


RN 604010-42-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(trans-4-hydroxycyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

Relative stereochemistry.

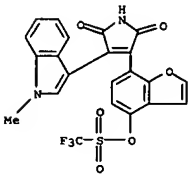


RN 604010-61-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-[3-(diethylamino)propoxy]-1-(1-methylethyl)-1H-indol-3-yl]-4-(5-fluoro-7-benzofuranyl)-, monohydrochloride (9CI) (CA INDEX NAME)

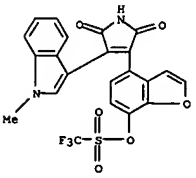


● HCl

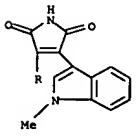
IT 604010-19-7 604010-20-0 604010-21-1
604010-22-2 604010-26-6 604010-27-7
604010-28-8 604010-29-9 604010-30-2
604010-31-3 604010-32-4 604010-33-5
604010-34-6 604010-63-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of 3-(indol-3-yl) 4-heteroaryl substituted pyrrole-2,5-diones
as GSK-3β inhibitors)
RN 604010-19-7 CAPLUS
CN Methanesulfonic acid, trifluoro-, 7-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-4-benzofuranyl ester (9CI) (CA INDEX NAME)

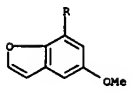


RN 604010-20-0 CAPLUS
CN Methanesulfonic acid, trifluoro-, 4-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-7-benzofuranyl ester (9CI) (CA INDEX NAME)

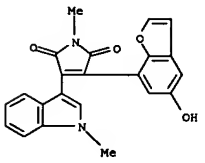


RN 604010-21-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-7-benzofuranyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

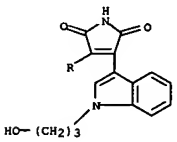


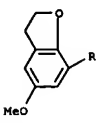


RN 604010-22-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-hydroxy-7-benzofuranyl)-1-methyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

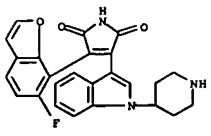


RN 604010-26-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dihydro-5-methoxy-7-benzofuranyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

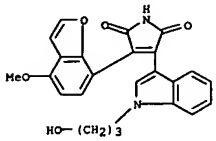




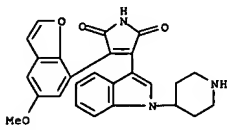
RN 604010-27-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



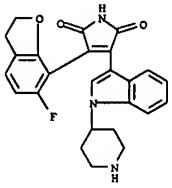
RN 604010-28-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(4-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



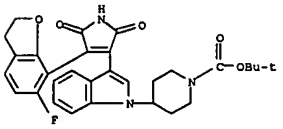
RN 604010-29-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



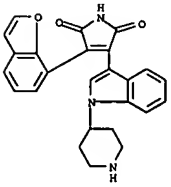
RN 604010-30-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[5-[[1-(phenylmethyl)-4-piperidinyl]oxy]-7-benzofuranyl]- (9CI) (CA INDEX NAME)



RN 604010-34-6 CAPLUS
CN 1-Piperidinecarboxylic acid, 4-[3-[4-(6-fluoro-2,3-dihydro-7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

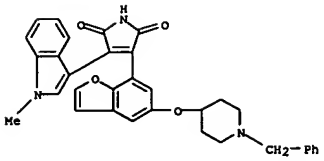


RN 604010-63-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]-, monohydrochloride (9CI) (CA INDEX NAME)

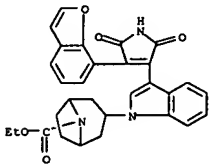


● HCl

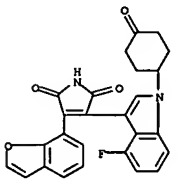
IT 604009-39-4P 604009-41-8P 604009-42-9P
604009-43-0P 604009-44-1P 604009-45-2P
604009-46-3P 604009-47-4P 604009-48-5P



RN 604010-31-3 CAPLUS
CN 8-Azabicyclo[3.2.1]octane-8-carboxylic acid, 3-[3-[4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-, ethyl ester, (3-endo)- (9CI) (CA INDEX NAME)



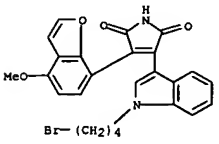
RN 604010-32-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[4-fluoro-1-(4-oxocyclohexyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



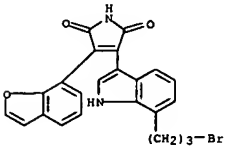
RN 604010-33-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-2,3-dihydro-7-benzofuranyl)-4-[1-(4-piperidinyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

604009-49-6P 604009-50-9P 604009-80-5P
604009-81-6P 604009-82-7P 604009-83-8P
604009-84-9P 604009-85-0P 604009-86-1P
604009-87-2P 604009-88-3P 604009-89-4P
604009-90-7P 604009-91-8P 604009-92-9P
604009-93-0P 604009-94-1P 604009-95-2P
604009-96-3P 604009-97-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(prepn. of 3-(indol-3-yl) 4-heteroaryl substituted pyrrole-2,5-diones as GSK-3β inhibitors)

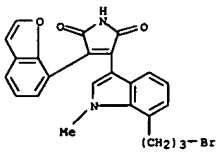
RN 604009-39-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(4-bromobutyl)-1H-indol-3-yl]-4-(4-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



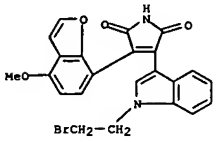
RN 604009-41-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-bromopropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



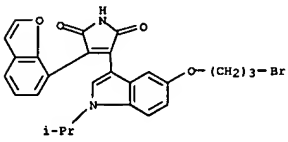
RN 604009-42-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-bromopropyl)-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



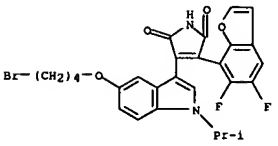
RN 604009-43-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(2-bromoethyl)-1H-indol-3-yl]-4-(4-methoxy-7-benzofuranyl)- (9CI) (CA INDEX NAME)



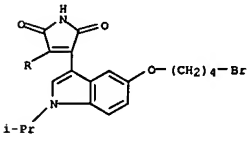
RN 604009-44-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-(3-bromopropoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

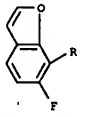


RN 604009-45-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[7-(3-bromopropyl)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

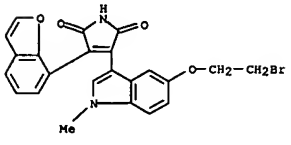


RN 604009-49-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-(4-bromobutoxy)-1-(1-methylethyl)-1H-indol-3-yl]-4-(6-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)

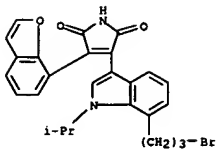




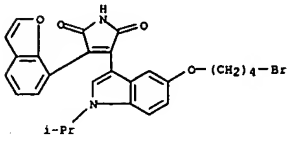
RN 604009-50-9 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(7-benzofuranyl)-4-[5-(2-bromoethoxy)-1-methyl-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



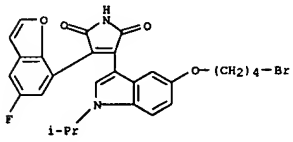
RN 604009-80-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-(phenylmethoxy)-7-benzofuranyl]-4-{1-[3-(1-



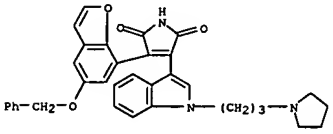
RN 604009-46-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[5-(4-bromobutoxy)-1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



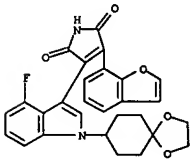
RN 604009-47-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-(4-bromobutoxy)-1-(1-methylethyl)-1H-indol-3-yl]-4-(5-fluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)



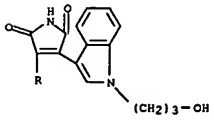
RN 604009-48-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-(4-bromobutoxy)-1-(1-methylethyl)-1H-indol-3-yl]-4-(5,6-difluoro-7-benzofuranyl)- (9CI) (CA INDEX NAME)

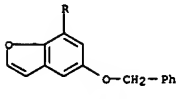


RN 604009-81-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-benzofuranyl)-4-[1-(1,4-dioxaspiro[4.5]dec-8-yl)-4-fluoro-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



RN 604009-82-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-[5-(phenylmethoxy)-7-benzofuranyl]- (9CI) (CA INDEX NAME)

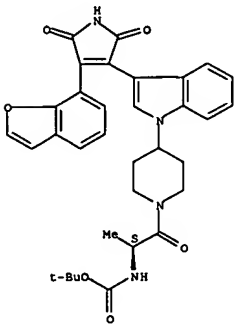




RN 604009-83-8 CAPLUS
CN Carbamic acid,
[(1S)-2-[4-[3-[4-(7-benzofuranyl)-2,5-dihydro-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]-1-piperidinyl]-1-methyl-2-oxoethyl]-,

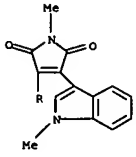
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

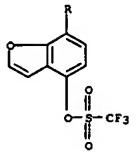


RN 604009-84-9 CAPLUS
CN Methanesulfonic acid, trifluoro-, 7-[2,5-dihydro-1-methyl-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-4-benzofuranyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

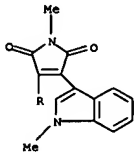


PAGE 2-A

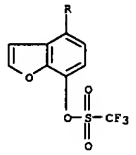


RN 604009-85-0 CAPLUS
CN Methanesulfonic acid, trifluoro-, 4-[2,5-dihydro-1-methyl-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-7-benzofuranyl ester (9CI) (CA INDEX NAME)

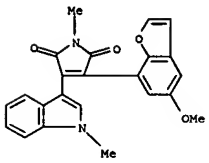
PAGE 1-A



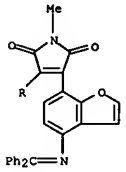
PAGE 2-A

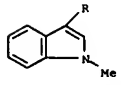


RN 604009-86-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-7-benzofuranyl)-1-methyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

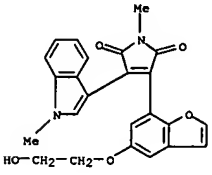


RN 604009-87-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[(diphenylmethylene)amino]-7-benzofuranyl]-1-methyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

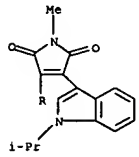


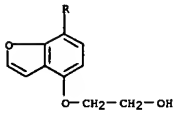


RN 604009-88-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-(2-hydroxyethoxy)-7-benzofuranyl]-1-methyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

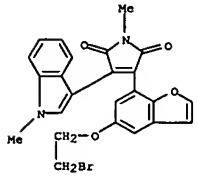


RN 604009-89-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-(2-hydroxyethoxy)-7-benzofuranyl]-1-methyl-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

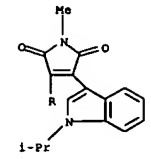


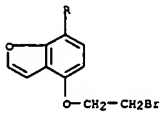


RN 604009-90-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-(2-bromoethoxy)-7-benzofuranyl]-1-methyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

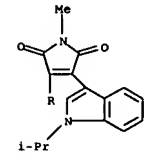


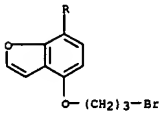
RN 604009-91-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-(2-bromoethoxy)-7-benzofuranyl]-1-methyl-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



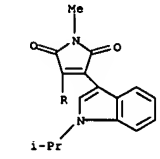


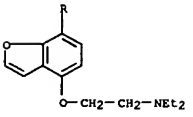
RN 604009-92-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-(3-bromopropoxy)-7-benzofuranyl]-1-methyl-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



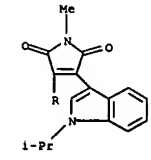


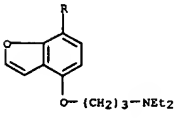
RN 604009-93-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-[2-(diethylamino)ethoxy]-7-benzofuranyl]-1-methyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



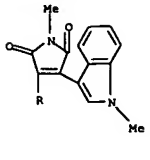


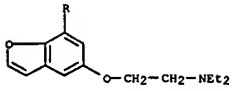
RN 604009-96-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[3-(diethylamino)propoxy]-7-benzofuranyl]-1-methyl-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



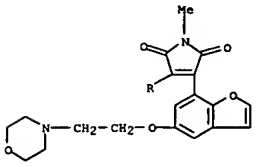


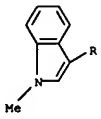
RN 604009-97-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[3-[(methylsulfonyl)oxy]propyl]-1H-indol-3-yl]-4-[5-(phenylmethoxy)-7-benzofuranyl]- (9CI) (CA INDEX NAME)



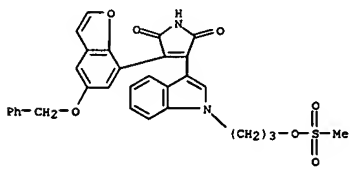


RN 604009-94-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-[5-[2-(4-morpholinyl)ethoxy]-7-benzofuranyl]- (9CI) (CA INDEX NAME)





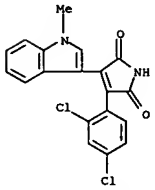
RN 604009-95-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[2-(diethylamino)ethoxy]-7-benzofuranyl]-1-methyl-4-[1-(1-methylethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



L6 ANSWER 34 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:710424 CAPLUS
DOCUMENT NUMBER: 140:157240
TITLE: Glycogen synthase kinase-3 inhibitors protect central neurons against excitotoxicity
AUTHOR(S): Facci, Laura; Stevens, David A.; Skaper, Stephen D.
CORPORATE SOURCE: Neurophysiology and Cell Sciences, Neurology and GI Centre of Excellence for Drug Discovery, GlaxoSmithKline Research and Development Ltd., Essex, CM19 5AW, UK
SOURCE: NeuroReport (2003), 14(11), 1467-1470
CODEN: NERPEZ; ISSN: 0959-4965
PUBLISHER: Lippincott Williams & Wilkins
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Protein kinase B (PKB, or Akt), a downstream effector of phosphatidylinositol 3-kinase (PI-3-K), can play a critical role in regulating neuronal survival. Among known targets of PKB, glycogen synthase kinase-3 (GSK-3) is inhibited by PKB-mediated phosphorylation. Recent studies implicate GSK-3 as a physiol. relevant principal regulatory target of the PI-3-K/PKB survival pathway. SB-216763 and SB-415286, selective small mol. inhibitors of GSK-3, protected cultured rat cerebellar granule neurons and hippocampal neurons against excitotoxicity mediated by NMDA and non-NMDA receptor agonists. Treatment with SB-216763 and SB-415286 was optimal when initiated 6-7 days before excitotoxin exposure. As GSK-3 can modulate transcriptional events, these results may provide insight into the identification of new neuroprotective targets.

IT **280744-09-4**, SB-216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(glycogen synthase kinase-3 inhibitors protect cerebellar and hippocampal neurons against excitotoxicity)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



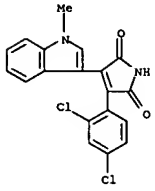
REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 35 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:644688 CAPLUS
DOCUMENT NUMBER: 139:335566
TITLE: Inhibition of glycogen synthase kinase 3β in sensory neurons in culture alters filopodia dynamics and microtubule distribution in growth cones
AUTHOR(S): Owen, Rebecca; Gordon-Weeks, Phillip R.
CORPORATE SOURCE: The MRC Centre for Developmental Neurobiology, King's College London, London, SE1 1UL, UK
SOURCE: Molecular and Cellular Neuroscience (2003), 23(4), 626-637
CODEN: MOCNED; ISSN: 1044-7431
PUBLISHER: Elsevier Science
DOCUMENT TYPE: Journal
LANGUAGE: English

AB MAP1B is a major microtubule-associated phospho-protein in growing axons and growth cones. Recent findings suggest that glycogen synthase kinase 3β (GSK-3β) phosphorylation of MAP1B may act as a mol. switch to regulate microtubule stability during axonogenesis. The effects of lithium, an inhibitor of GSK-3β, on neurons in culture, are consistent with this suggestion. However, lithium is not a specific inhibitor of GSK-3β. In the expts. reported here we have compared the effects of lithium with SB-216763, a new, potent and specific inhibitor of GSK-3 that has a different mechanism of action from lithium. We examined the effects of inhibition of GSK-3β on axonogenesis, microtubule distribution, and growth cone behavior in cultured embryonic chick primary sensory neurons. Both compds. reduced axon elongation rates and increased growth cone size. In addition, both compds. slowed growth cone filopodia dynamics. These behavioral changes correlated with a decrease in MAP1B phosphorylation and an increase in the number of stable microtubules in growth cones. These results suggest that a major role of MAP1B in growing axons and growth cones is to regulate microtubule and actin filament stability. Furthermore, this function is regulated by phosphorylation of MAP1B by GSK-3β.

IT **280744-09-4**, SB-216763
RL: BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(GSK-3β inhibitor; inhibition of glycogen synthase kinase 3β in cultured embryonic chick sensory neurons alters filopodia dynamics and microtubule distribution in growth cones)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 35 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 36 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:551367 CAPLUS
DOCUMENT NUMBER: 139:106486
TITLE: Use of a GSK-3β inhibitor in the manufacture of a medicament for increasing bone formation
INVENTOR(S): Day-Lollini, Patricia Ann; Gong, Leyi
PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.
SOURCE: PCT Int. Appl., 48 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 2003057202	A1	20030717	WO 2003-EP49		20030107
WO 2003057202	C1	20031211			
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW					
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
CA 2471565	AA	20030717	CA 2003-2471565		20030107
AU 2003235798	A1	20030724	AU 2003-235798		20030107
EP 1465610	A1	20041013	EP 2003-729222		20030107
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK					
JP 2005519056	T2	20050630	JP 2003-557560		20030107
US 2003176484	A1	20030918	US 2003-339193		20030109
PRIORITY APPLN. INFO.:			US 2002-348055P	P	20020110
			WO 2003-EP49	W	20030107

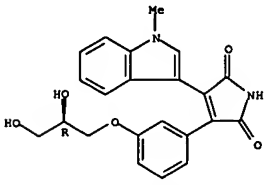
OTHER SOURCE(S): MARPAT 139:106486

AB This invention relates to the use of inhibitors of glycogen synthase kinase-3β (GSK-3β) to promote bone formation and treat bone metabolic diseases, such as osteoporosis. For example, 3-(1-methyl-5-chloroindol-3-yl)-4-[3-[2,3-dihydroxypropylamino]phenyl]-1H-pyrrole-2,5-dione was synthesized. GSK-3β inhibitors were formulated in various dosage forms, e.g., tablets, capsules, oral suspensions, and suppositories.

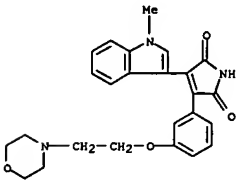
IT **396090-78-1P 396090-83-8P 396090-96-3P**
396090-98-5P 396091-05-7P 396091-12-6P
396091-16-0P 396091-63-7P 396091-71-7P
425636-61-9P 561066-07-7P 561066-08-8P
561066-09-9P 561066-10-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and oral compns. of glycogen synthase kinase-3β inhibitors for increasing bone formation)
RN 396090-78-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-

1H-indol-3-yl)- (9CI) (CA INDEX NAME)

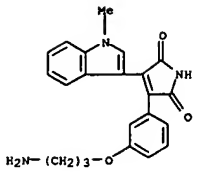
Absolute stereochemistry.



RN 396090-83-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-[2-(4-morpholinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

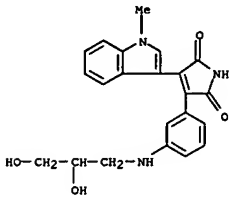


RN 396090-96-3 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-(3-aminopropoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

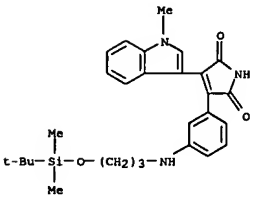


● HCl

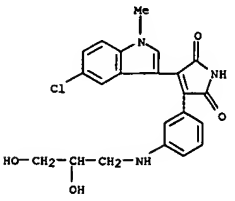
RN 396090-98-5 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



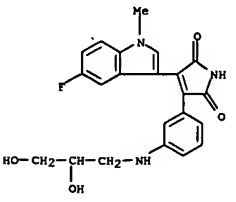
RN 396091-05-7 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propyl]amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



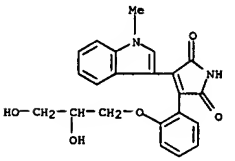
RN 396091-12-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-methyl-1H-indol-3-yl)-4-[3-[(2,3-dihydroxypropyl)amino]phenyl]- (9CI) (CA INDEX NAME)



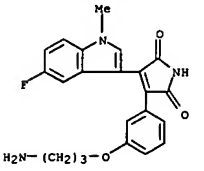
RN 396091-16-0 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-63-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-(2,3-dihydroxypropoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

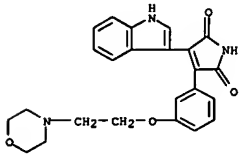


RN 396091-71-7 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-(3-aminopropoxy)phenyl]-4-(5-fluoro-1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

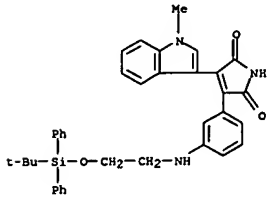


● HCl

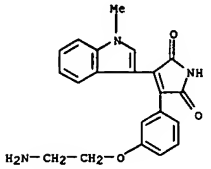
RN 425636-61-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(4-morpholinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)



RN 561066-07-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[2-[[(1,1-dimethylethyl)diphenylsilyl]oxy]ethyl]amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



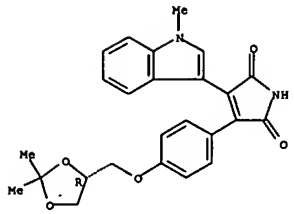
RN 561066-08-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(2-aminoethoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



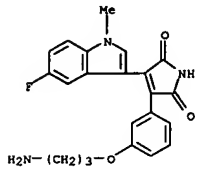
● HCl

RN 561066-09-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

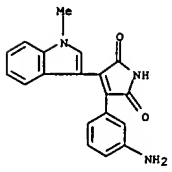


RN 561066-10-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(3-aminopropoxy)phenyl]-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

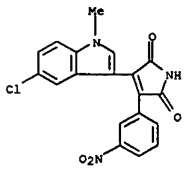


IT **125314-13-0P 396091-14-8P 396091-15-9P 396091-19-3P 396091-20-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oral compns. of glycogen synthase kinase-3β inhibitors for increasing bone formation)

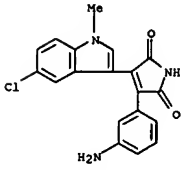
RN 125314-13-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



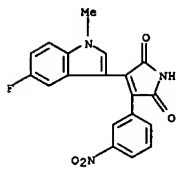
RN 396091-14-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



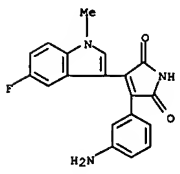
RN 396091-15-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-chloro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-19-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



RN 396091-20-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



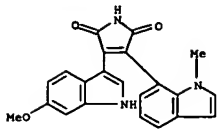
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 37 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:485870 CAPLUS
DOCUMENT NUMBER: 139:254721
TITLE: Novel, potent and selective cyclin D1/CDK4 inhibitors:
indolo[6,7-a]pyrrolo[3,4-c]carbazoles
AUTHOR(S): Engler, Thomas A.; Furness, Kelly; Malhotra, Sushant; Sanchez-Martinez, Concha; Shih, Chuan; Xie, Walter; Zhu, Guoxin; Zhou, Xun; Conner, Scott; Faul, Margaret M.; Sullivan, Kevin A.; Kolis, Stanley P.; Brooks, Harold B.; Patel, Bharvin; Schultz, Richard M.; DeHahn, Tammy B.; Kirmani, Kashif; Spencer, Charles D.; Watkins, Scott A.; Considine, Eileen L.; Dempsey, Jack A.; Ogg, Catherine A.; Stamm, Nancy B.; Anderson,
Bryan D.; Campbell, Robert M.; Vasudevan, Vasu; Lytle,
Michelle L.
CORPORATE SOURCE: Lilly Research Laboratories, Eli Lilly and Company, Indianapolis, IN, 46285, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(14), 2261-2267
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:254721

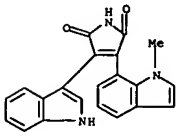
AB The synthesis and CDK inhibitory properties of a series of indolo[6,7-a]pyrrolo[3,4-c]carbazoles is reported. In addition to their potent CDK activity, the compds. display antiproliferative activity against two human cancer cell lines. These inhibitors also effect strong G1 arrest in these cell lines and inhibit Rb phosphorylation at Ser780 consistent with inhibition of cyclin D1/CDK4.

IT 408354-39-2P 408354-44-9P 408354-52-9P
408354-57-4P 408354-59-6P 408354-61-0P
408354-63-2P 408354-64-3P 408354-68-7P
408354-72-3P 408354-75-6P 408354-77-8P
408354-79-0P 408354-81-4P 408354-84-7P
408354-88-1P 408354-99-4P 408355-01-1P
408355-35-1P 408355-43-1P 408355-45-3P
408355-60-2P 408355-83-9P 408356-07-0P
408356-31-0P 408356-37-6P 408356-43-4P
408356-45-6P 408356-48-9P 408356-62-7P
408358-49-6P 601524-87-2P 601524-88-3P
601524-89-4P 601524-90-7P 601524-91-8P
601524-92-9P 601524-93-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(indolopyrrolocarbazoles as selective cyclin D1/CDK4 inhibitors)

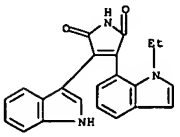
RN 408354-39-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



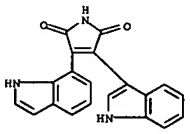
RN 408354-44-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



RN 408354-52-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-ethyl-1H-indol-7-yl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

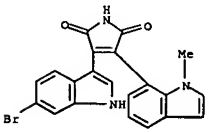


RN 408354-57-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1H-indol-7-yl)- (9CI) (CA INDEX NAME)

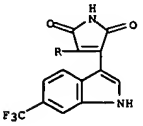


L6 ANSWER 37 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

RN 408354-59-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

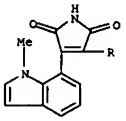


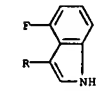
RN 408354-61-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[6-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



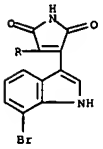
RN 408354-63-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

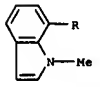
L6 ANSWER 37 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



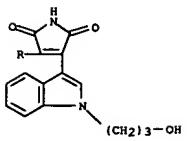


RN 408354-64-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

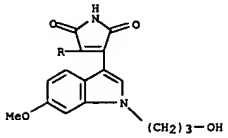


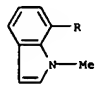


RN 408354-68-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

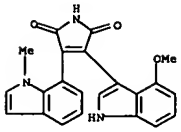


RN 408354-72-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

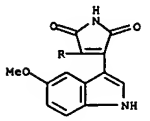




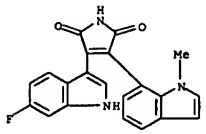
RN 408354-75-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



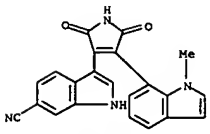
RN 408354-77-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



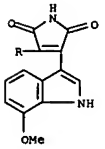
RN 408354-79-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



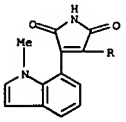
RN 408354-81-4 CAPLUS
CN 1H-Indole-6-carbonitrile, 3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]- (9CI) (CA INDEX NAME)

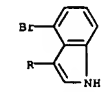


RN 408354-84-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

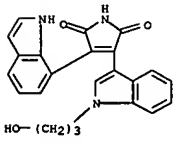


RN 408354-88-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

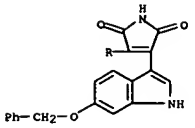




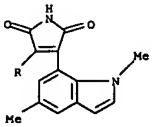
RN 408354-99-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1H-indol-7-yl)- (9CI) (CA INDEX NAME)

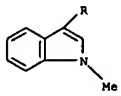


RN 408355-01-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[6-(phenylmethoxy)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

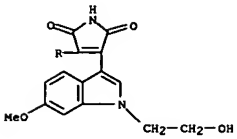


RN 408355-35-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

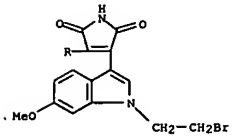




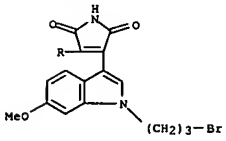
RN 408355-43-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(2-hydroxyethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



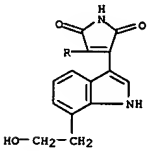
RN 408355-45-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(2-bromoethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



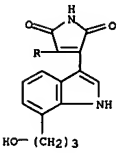
RN 408355-60-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-bromopropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



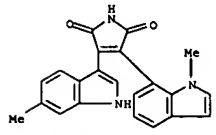
RN 408355-83-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(2-hydroxyethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



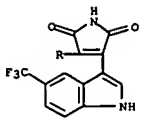
RN 408356-07-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

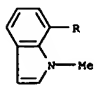


RN 408356-31-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-(6-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

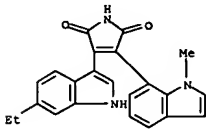


RN 408356-37-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[5-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

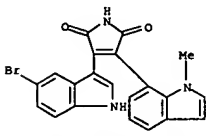




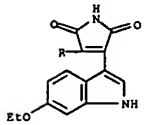
RN 408356-43-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-ethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-(9CI) (CA INDEX NAME)

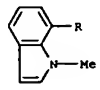


RN 408356-45-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-(9CI) (CA INDEX NAME)

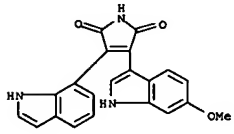


RN 408356-48-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-ethoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

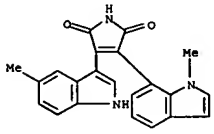




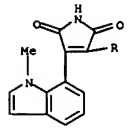
RN 408356-62-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

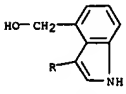


RN 408358-49-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-(5-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

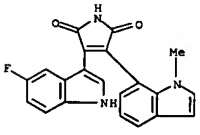


RN 601524-87-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-(hydroxymethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

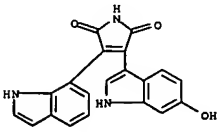




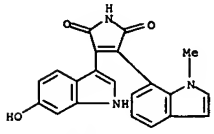
RN 601524-88-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



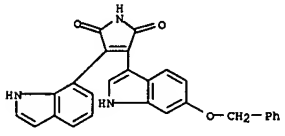
RN 601524-89-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-hydroxy-1H-indol-3-yl)-4-(1H-indol-7-yl)-(9CI) (CA INDEX NAME)



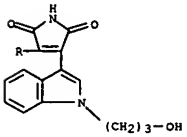
RN 601524-90-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-hydroxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

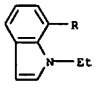


RN 601524-91-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-7-yl)-4-[6-(phenylmethoxy)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



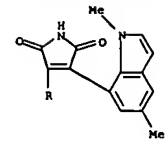
RN 601524-92-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-ethyl-1H-indol-7-yl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

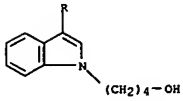




RN 601524-93-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-[1-(4-hydroxybutyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

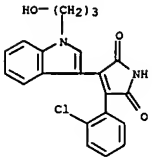
L6 ANSWER 37 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



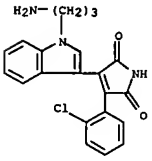


REFERENCE COUNT: 59 THERE ARE 59 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 38 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 280744-11-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-aminopropyl)-1H-indol-3-yl]-4-(2-chlorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 38 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

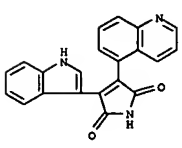
ACCESSION NUMBER: 2003:261970 CAPLUS
DOCUMENT NUMBER: 138:281150
TITLE: Inhibitors of glycogen synthase kinase-3 for treating glaucoma
INVENTOR(S): Hellberg, Mark R.; Clark, Abbot F.; Pang, Iok-Hou; Hellberg, Peggy Elizabeth; McNatt, Loretta Graves; Wang, Wan-Heng
PATENT ASSIGNEE(S): Alcon, Inc., Switz.
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003027275	A1	20030403	WO 2002-US30059	20020923
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR				
CA 2460000	AA	20030403	CA 2002-2460000	20020923
EP 1430120	A1	20040623	EP 2002-799603	20020923
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
BR 2002012924	A	20050104	BR 2002-12924	20020923
JP 2005504101	T2	20050210	JP 2003-530847	20020923
US 2004186159	A1	20040923	US 2004-488496	20040302
ZA 2004001846	A	20050307	ZA 2004-1846	20040305
JP 2005320350	A2	20051117	JP 2005-211956	20050721
PRIORITY APPLN. INFO.:			US 2001-325390P	P 20010927
			JP 2003-530847	A3 20020923
			WO 2002-US30059	W 20020923

OTHER SOURCE(S): MARPAT 138:281150
AB The use of inhibitors of glycogen synthase kinase-3 (GSK-3) useful for treating glaucoma is disclosed. The inhibitors are selected from the group consisting of indirubine analogs, 2,4-diaminothiazole analogs, 1,2,4-triazolecarboxylic acid derivs. or analogs, hymenialdesine or derivs. or analogs, and paullone analogs. Preferred inhibitors comprise 3-(1-[3-aminopropyl]-3-indolyl)-4-(2-chlorophenyl)pyrrole-2,5-dione and 3-(1-[3-hydroxypropyl]-3-indolyl)-4-(2-chlorophenyl)pyrrole-2,5-dione. The compds. are formulated in pharmaceutical compns. suitable for topical delivery to the eye.
IT **280744-10-7 280744-11-8**
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibitors of glycogen synthase kinase-3 for treating glaucoma)
RN 280744-10-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

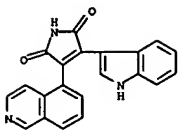
L6 ANSWER 39 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:236058 CAPLUS
DOCUMENT NUMBER: 139:127404
TITLE: Synthesis of quinolinyl/isoquinolinyl[a]pyrrolo[3,4-c] carbazoles as cyclin D1/CDK4 inhibitors
AUTHOR(S): Zhu, Guoxin; Conner, Scott; Zhou, Xun; Shih, Chuan; Brooks, Harold B.; Considine, Eileen; Dempsey, Jack A.; Ogg, Cathy; Patel, Bharvin; Schultz, Richard M.; Spencer, Charles D.; Teicher, Beverly; Watkins, Scott A.
CORPORATE SOURCE: A Division of Eli Lilly and Company, Lilly Research Laboratories, Lilly Corporate Center, Indianapolis, IN, 46285, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(7), 1231-1235
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:127404
AB A novel series of pyrrolo[3,4-c] carbazoles fused with a quinolinyl/isoquinolinyl moiety were synthesized and their D1/CDK4 inhibitory and antiproliferative activity were evaluated. Compound 14H-isoquinolinyl[6,5-a]-pyrrolo[3,4-c]carbazole-7,9-dione was found to be a highly potent D1/CDK4 inhibitor with an IC50 of 69 nM. One compd.also inhibited tumor cell growth, arrested tumor cells in G1 phase and inhibited pRb phosphorylation.
IT **569337-80-0P 569337-82-2P 569337-84-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of quinolinylisoquinolinylpyrrolocarbazoles as cyclin D1-CDK4 inhibitors)
RN 569337-80-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(5-quinolinyl)- (9CI) (CA INDEX NAME)

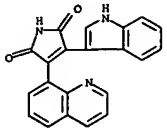


RN 569337-82-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(5-isoquinolinyl)- (9CI) (CA INDEX NAME)

L6 ANSWER 39 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

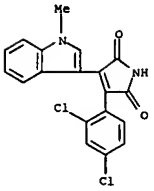


RN 569337-84-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(8-quinolinyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 40 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 40 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:615439 CAPLUS
DOCUMENT NUMBER: 137:150255
TITLE: Nerve regeneration-associated treatment of neuronal injury conditions with glycogen synthase kinase 3 (GSK-3) inhibitors
INVENTOR(S): Doherty, Patrick; Eickholt, Britta Johanna; Skaper, Stephen Drake; Walsh, Frank Sinclair
PATENT ASSIGNEE(S): Smithkline Beecham P.L.C., UK
SOURCE: PCT Int. Appl., 22 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

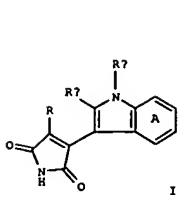
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002062387	A1	20020815	WO 2002-GB542	20020207
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRIORITY APPLN. INFO.:			GB 2001-3031	A 20010207

AB A method of treatment for the promotion of nerve regeneration, including axonal regrowth, axonal outgrowth, and prevention of growth cone collapse, in cases of acute neuronal injury, such as crush injury, acute stroke, ischemia, neurotraumatic insult, spinal cord injury and neurotrauma in humans or non-human mammals is provided. The method comprises the administration of an effective, nontoxic and pharmaceutically acceptable amount of a GSK-3 inhibitor or a pharmaceutically acceptable derivative thereof.
IT 280744-09-4, SB 216763
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(GSK-3 inhibitors for nerve regeneration-associated treatment of neuronal injury conditions)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

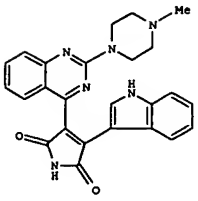
L6 ANSWER 41 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:368469 CAPLUS
DOCUMENT NUMBER: 136:386017
TITLE: Preparation of indolylmaleimide derivatives as protein kinase c inhibitors
INVENTOR(S): Albert, Rainer; Cooke, Nigel Graham; Cottens, Sylvain; Ehrhardt, Claus; Evenou, Jean-Pierre; Sedrani, Richard; Von Matt, Peter; Wagner, Juergen; Zenke, Gerhard
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis-Erfindungen Verwaltungsgesellschaft m.b.H.
SOURCE: PCT Int. Appl., 50 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002038561	A1	20020516	WO 2001-EP12785	20011105
WO 2002038561	C1	20031218		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SE, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, YU, ZA, ZW				
RW: AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR				
CA 2428133	AA	20020516	CA 2001-2428133	20011105
AU 2002021810	A5	20020521	AU 2002-21810	20011105
US 2003069424	A1	20030410	US 2001-7368	20011105
US 6645970	B2	20031111		
EP 1337527	A1	20030827	EP 2001-993604	20011105
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001015193	A	20040203	BR 2001-15193	20011105
JP 2004513168	T2	20040430	JP 2002-541095	20011105
NZ 525656	A	20041224	NZ 2001-525656	20011105
ZA 2003003426	A	20040422	ZA 2003-3426	20030505
NO 2003002034	A	20030704	NO 2003-2034	20030506
US 2004053949	A1	20040318	US 2003-660442	20030911
PRIORITY APPLN. INFO.:			US 2000-246400P	P 20001107
			US 2001-283705P	P 20010413
			US 2001-7368	A1 20011105
			WO 2001-EP12785	W 20011105

OTHER SOURCE(S): MARPAT 136:386017
GI



I



II

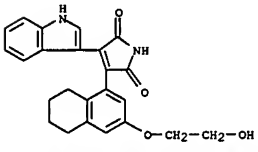
AB Title compds. I [Ra = H, alkyl; Rb = H, alkyl; R = (un)substituted Ph, naphthyl, quinazolinyl, pyrimidinyl, etc.; ring A is optionally substituted) were prepared Examples include over 180 compds. and assays for activity with several protein kinase C (PKC) isoforms. For instance, 1H,3H-quinazolin-2,4-dione was converted to 2,4-dichloroquinazoline (POCl3, Me2NPh, 110°C) and used to alkylate Et acetoacetate (i. THF, NaH, 0°C; ii. PhMe, reflux; iii. NH4OH, overnight) resulting in the formation of 2-(2-chloroquinazolin-4-yl)acetamide. This was dissolved in NMP and reacted with excess N-methylpiperazine to give 2-[2-(4-methylpiperazin-1-yl)quinazolin-4-yl]acetamide. Reaction of the acetamide with 3-indoleglyoxylic acid Me ester (THF, KOBu-t, 0°C → room temperature, overnight) provided II as an orange-red powder. II had IC50 < 10 nM for PKC9. I are useful for preventing or treating disorders or diseases mediated by T lymphocytes and/or PKC.

IT **425637-11-2P**

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(drug; preparation of indolylmaleimide derivs. as protein kinase c inhibitors)

RN 425637-11-2 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[5,6,7,8-tetrahydro-3-(2-hydroxyethoxy)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



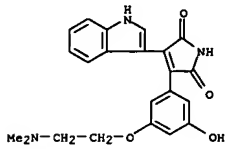
IT **425636-53-9P 425636-54-0P 425636-55-1P 425636-56-2P 425636-57-3P 425636-58-4P 425636-59-5P 425636-60-8P 425636-61-9P 425636-62-0P 425636-63-1P 425636-64-2P**

425636-65-3P 425636-66-4P 425636-67-5P 425636-68-6P 425636-69-7P 425636-70-0P 425636-71-1P 425636-72-2P 425636-73-3P 425636-74-4P 425636-75-5P 425636-76-6P 425636-77-7P 425636-78-8P 425636-79-9P 425636-80-2P 425636-81-3P 425636-82-4P 425636-83-5P 425636-84-6P 425636-85-7P 425636-86-8P 425636-87-9P 425636-88-0P 425636-89-1P 425636-90-4P 425636-91-5P 425636-92-6P 425636-93-7P 425636-94-8P 425636-95-9P 425636-96-0P 425636-97-1P 425636-98-2P 425637-00-9P 425637-02-1P 425637-04-3P 425637-06-5P 425637-08-7P 425637-10-1P 425637-13-4P 425637-15-6P 425638-62-6P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; prepn. of indolylmaleimide derivs. as protein kinase c inhibitors)

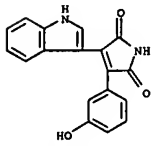
RN 425636-53-9 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-[3-(2-(dimethylamino)ethoxy)-5-hydroxyphenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



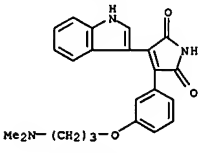
RN 425636-54-0 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(3-hydroxyphenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



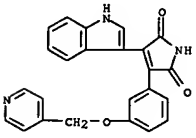
RN 425636-55-1 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-[3-[3-(dimethylamino)propoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



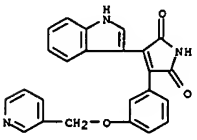
RN 425636-56-2 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(4-pyridinylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



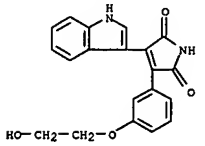
RN 425636-57-3 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(3-pyridinylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



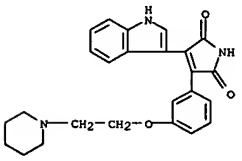
RN 425636-58-4 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-[3-(2-hydroxyethoxy)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



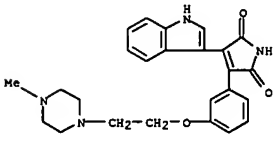
RN 425636-59-5 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(1-piperidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)



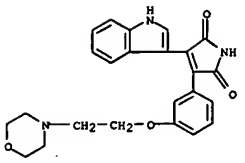
RN 425636-60-8 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(4-methyl-1-piperazinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

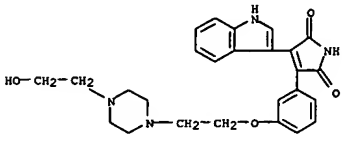


RN 425636-61-9 CAPLUS

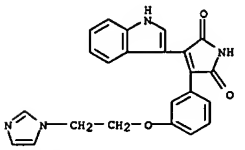
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(4-morpholinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)



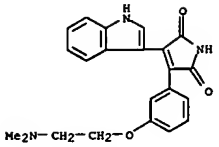
RN 425636-62-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-[4-(2-hydroxyethyl)-1-piperazinyl]ethoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



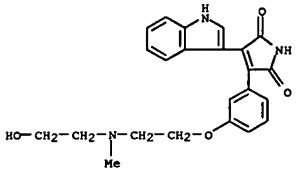
RN 425636-63-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(1H-imidazol-1-yl)ethoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



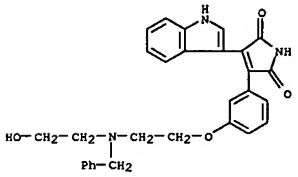
RN 425636-64-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(dimethylamino)ethoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



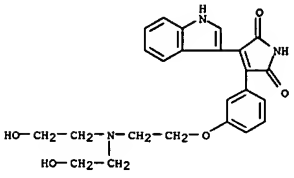
RN 425636-65-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-[(2-hydroxyethyl)methylamino]ethoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



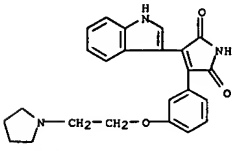
RN 425636-66-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-[(2-hydroxyethyl)(phenylmethyl)amino]ethoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



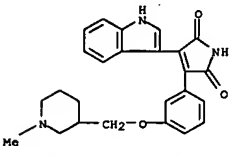
RN 425636-67-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-[bis(2-hydroxyethyl)amino]ethoxy]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



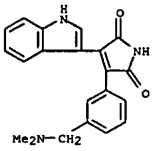
RN 425636-68-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(1-pyrrolidinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)



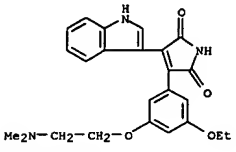
RN 425636-69-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[(1-methyl-3-piperidinyl)methoxy]phenyl]- (9CI) (CA INDEX NAME)



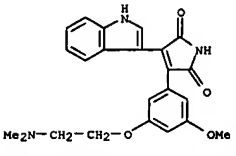
RN 425636-70-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(dimethylamino)methyl]phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



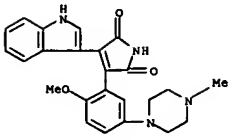
RN 425636-71-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(dimethylamino)ethoxy]-5-ethoxyphenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



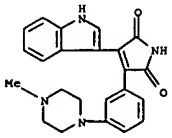
RN 425636-72-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(dimethylamino)ethoxy]-5-methoxyphenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



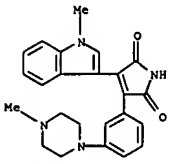
RN 425636-73-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[2-methoxy-5-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



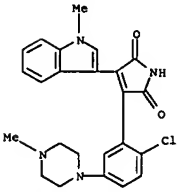
RN 425636-74-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



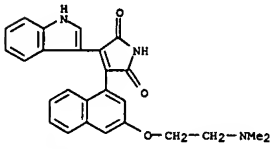
RN 425636-75-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



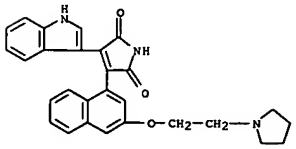
RN 425636-76-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[2-methyl-5-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



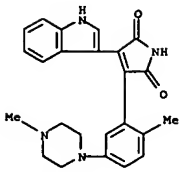
RN 425636-80-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(dimethylamino)ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



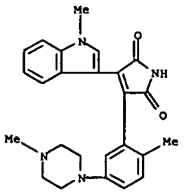
RN 425636-81-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(1-pyrrolidinyl)ethoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)



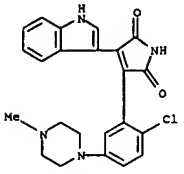
RN 425636-82-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-[(2-hydroxyethyl)methylamino]ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



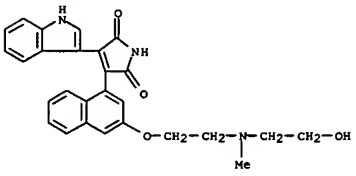
RN 425636-77-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[2-methyl-5-(4-methyl-1-piperazinyl)phenyl]- (9CI) (CA INDEX NAME)



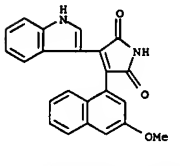
RN 425636-78-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



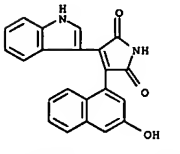
RN 425636-79-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-chloro-5-(4-methyl-1-piperazinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



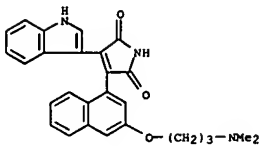
RN 425636-83-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(3-methoxy-1-naphthalenyl)- (9CI) (CA INDEX NAME)



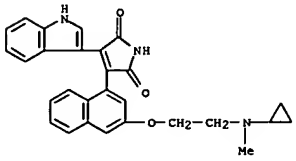
RN 425636-84-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-hydroxy-1-naphthalenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



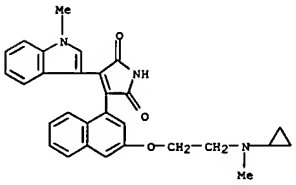
RN 425636-85-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[3-(dimethylamino)propoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



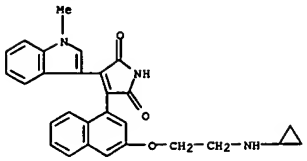
RN 425636-86-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(cyclopropylmethylamino)ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



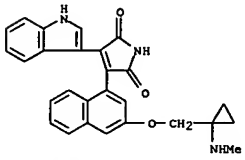
RN 425636-87-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(cyclopropylmethylamino)ethoxy]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



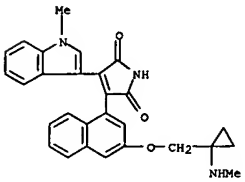
RN 425636-88-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(cyclopropylamino)ethoxy]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



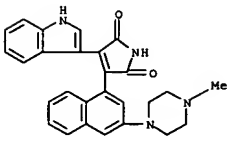
RN 425636-89-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[[1-(methylamino)cyclopropyl]methoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)



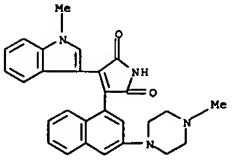
RN 425636-90-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[1-(methylamino)cyclopropyl]methoxy]-1-naphthalenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



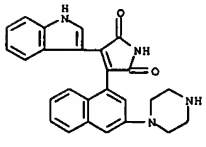
RN 425636-91-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(4-methyl-1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



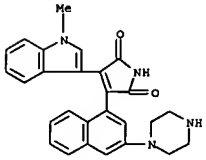
RN 425636-92-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(4-methyl-1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



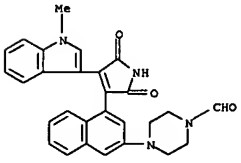
RN 425636-93-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



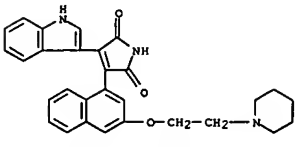
RN 425636-94-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)



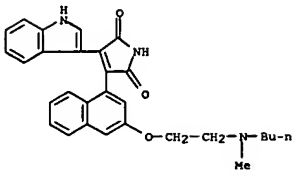
RN 425636-95-9 CAPLUS
CN 1-Piperazinecarboxaldehyde, 4-[4-[2,5-dihydro-4-(1-methyl-1H-indol-3-yl)-2,5-dioxo-1H-pyrrol-3-yl]-2-naphthalenyl]- (9CI) (CA INDEX NAME)



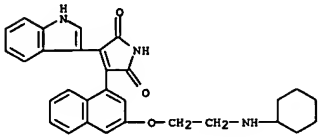
RN 425636-96-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(1-piperidinyl)ethoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)



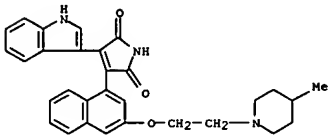
RN 425636-97-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(butylmethylamino)ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



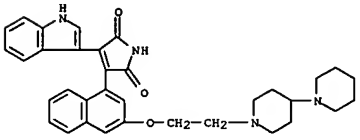
RN 425636-98-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(cyclohexylamino)ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



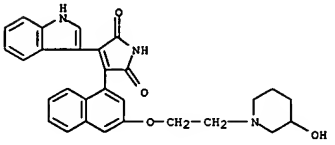
RN 425637-00-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(4-methyl-1-piperidinyl)ethoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)



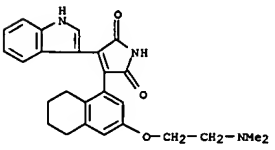
RN 425637-02-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-(2-methyl-1-pyrrolidinyl)ethoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)



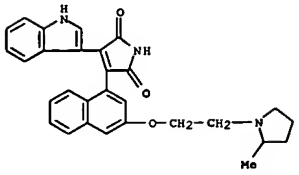
RN 425637-10-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(3-hydroxy-1-piperidinyl)ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



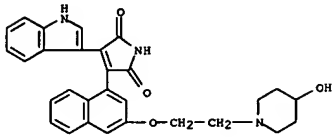
RN 425637-13-4 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[2-(dimethylamino)ethoxy]-5,6,7,8-tetrahydro-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 425637-15-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(1H-indol-3-yl)-4-[5,6,7,8-tetrahydro-3-(4-methyl-1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)

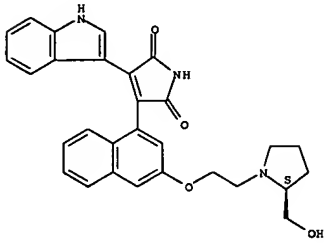


RN 425637-04-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(4-hydroxy-1-piperidinyl)ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

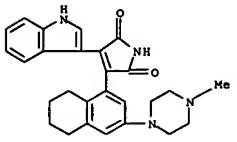


RN 425637-06-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]ethoxy]-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

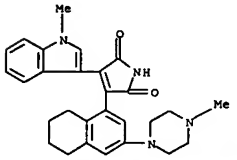
Absolute stereochemistry.



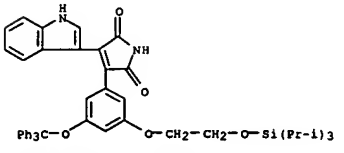
RN 425637-08-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(2-[1,4'-bipiperidin]-1'-ylethoxy)-1-



RN 425638-62-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[5,6,7,8-tetrahydro-3-(4-methyl-1-piperazinyl)-1-naphthalenyl]- (9CI) (CA INDEX NAME)

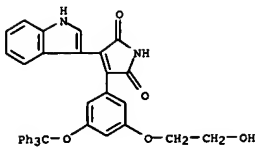


IT **425638-67-1P 425638-68-2P 425638-69-3P**
425638-70-6P 425638-71-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of indolylmaleimide derivs. as protein kinase c
inhibitors)
RN 425638-67-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(triphenylmethoxy)-5-[2-[[tris(1-methylethyl)silyl]oxy]ethoxy]phenyl]- (9CI) (CA INDEX NAME)

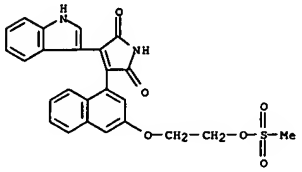


RN 425638-68-2 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-(2-hydroxyethoxy)-5-(triphenylmethoxy)phenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

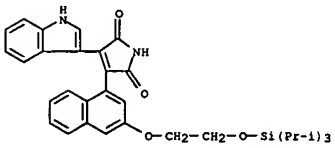
L6 ANSWER 41 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 425638-69-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-[(methylsulfonyl)oxy]ethoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)

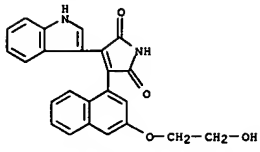


RN 425638-70-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-[[tris(1-methylethyl)silyl]oxy]ethoxy]-1-naphthalenyl]- (9CI) (CA INDEX NAME)

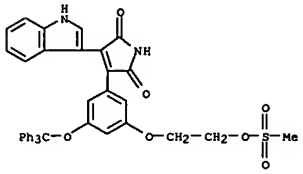


RN 425638-71-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(2-hydroxyethoxy)-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

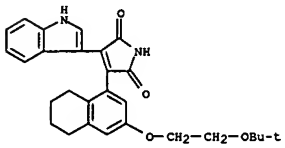
L6 ANSWER 41 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 425638-78-4 425638-81-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of indolylmaleimide derivs. as protein kinase c inhibitors)
RN 425638-78-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-[2-[(methylsulfonyl)oxy]ethoxy]-5-(triphenylmethoxy)phenyl]- (9CI) (CA INDEX NAME)



RN 425638-81-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[2-(1,1-dimethylethoxy)ethoxy]-5,6,7,8-tetrahydro-1-naphthalenyl]-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

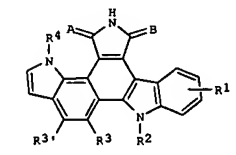
L6 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:275990 CAPLUS
DOCUMENT NUMBER: 136:294729
TITLE: Preparation and use of indolo-pyrrolo-carbazole derivatives as inhibitors of CDK4 kinase and methods for treating proliferative diseases
INVENTOR(S): Engler, Thomas Albert; Furness, Kelly Wayne; Malhotra, Sushant; Briggs, Stephen Lyle; Brooks, Harold Burns; Clawson, David Keyes; Sanchez-Martinez, Concepcion; Zhang, Faming; Zhu, Guoxin
PATENT ASSIGNEE(S): Eli Lilly and Company, USA
SOURCE: PCT Int. Appl., 226 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

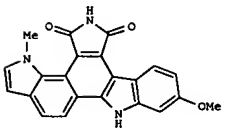
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002028861	A2	20020411	WO 2001-US27728	20010924
WO 2002028861	A3	20020801		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001092579	A5	20020415	AU 2001-92579	20010924
EP 1325011	A2	20030709	EP 2001-972948	20010924
EP 1325011	B1	20040506		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AT 266031	E	20040515	AT 2001-972948	20010924
PT 1325011	T	20040930	PT 2001-972948	20010924
ES 2220811	T3	20041216	ES 2001-1972948	20010924
US 2004048915	A1	20040311	US 2003-344245	20030207
PRIORITY APPLN. INFO.:			US 2000-236616P P	20000929
			WO 2001-US27728 W	20010924

OTHER SOURCE(S): MARPAT 136:294729
GI

L6 ANSWER 42 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



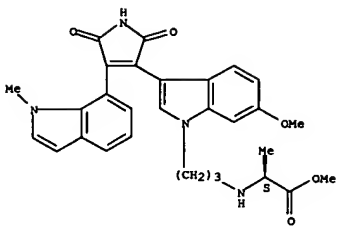
I



II

AB Title compds. I [A, B = O, S; R1 = alkyl, alkoxy, hydroxy(alkyl), halo(alkyl), CN, alkylamino, alkyl-ester; R2 = H, alkyl, hydroxy-alkyl, alkylamino, alkylamido, alkyl ester; R3-3' = H, alkyl, alkoxy, halo; R4 = H, alkyl] were prepared For instance, 3-(6-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione was prepared by reaction of 2-(1-methyl-1H-indol-7-yl)acetamide (preparation given) and (6-methoxy-1H-indol-3-yl)-α-oxoacetic acid Me ester (THF, KOBu-t, 0°C, 20 min). Cyclization of the intermediate pyrrole-2,5-dione was effected photochem. (EtOAc, 450W Hanovia lamp) in the presence of DDQ to give II. II had IC50 = 0.043 μM for CDK4 kinase using the RbING substrate. I are useful in the treatment of cell proliferative disorders, including cancer.
IT 408355-79-3P 408355-81-7P 408355-85-1P
408355-86-2P 408355-87-3P 408355-88-4P
408355-90-8P 408355-91-9P 408355-94-2P
408355-95-3P 408355-97-5P 408355-98-6P
408355-99-7P 408356-00-3P 408356-01-4P
408356-17-2P 408496-77-5P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; preparation and use of indolo-pyrrolo-carbazole derivs. as inhibitors of CDK4 kinase and methods for treating proliferative diseases)
RN 408355-79-3 CAPLUS
CN L-Alanine, N-[3-[3-(2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-6-methoxy-1H-indol-1-yl]propyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

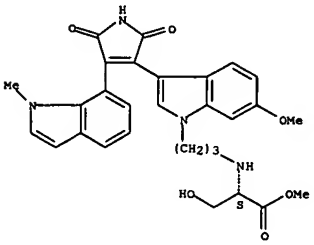


RN 408355-81-7 CAPLUS
CN L-Serine, N-[3-[3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-6-methoxy-1H-indol-1-yl]propyl]-, methyl ester, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

CM 1

CRN 408355-80-6
CMF C29 H30 N4 O6

Absolute stereochemistry. Rotation (+).

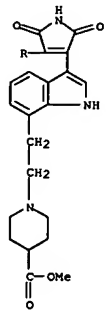


CM 2

CRN 76-05-1
CMF C2 H F3 O2

RN 408355-85-1 CAPLUS
CN 4-Piperidinecarboxylic acid, 1-[2-[3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-7-yl]ethyl]-, methyl ester (9CI) (CA INDEX NAME)

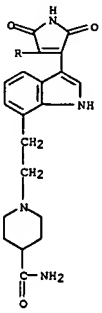
PAGE 1-A



PAGE 2-A

RN 408355-86-2 CAPLUS
CN 4-Piperidinecarboxamide, 1-[2-[3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-7-yl]ethyl]- (9CI) (CA INDEX NAME)

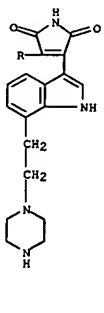
PAGE 1-A



PAGE 2-A

RN 408355-87-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[7-[2-(1-piperazinyl)ethyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

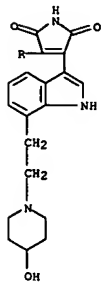
PAGE 1-A



PAGE 2-A

RN 408355-88-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-(4-hydroxy-1-piperidinyl)ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

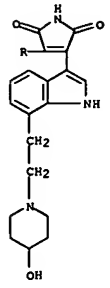
PAGE 1-A



PAGE 2-A

RN 408355-90-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-(4-hydroxy-1-piperidinyl)ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A

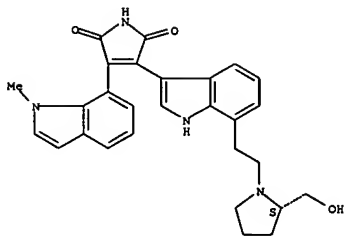


PAGE 2-A

● HCl

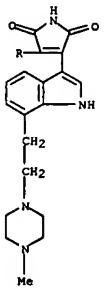
RN 408355-91-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

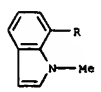


RN 408355-94-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[7-[2-(4-methyl-1-piperazinyl)ethyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

PAGE 1-A

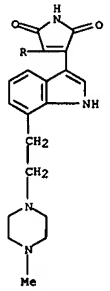


PAGE 2-A



RN 408355-95-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[7-[2-(4-methyl-1-piperazinyl)ethyl]-1H-indol-3-yl]-, dihydrochloride (9CI) (CA INDEX NAME)

PAGE 1-A



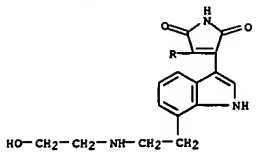
PAGE 2-A

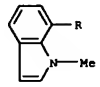
●2 HCl

RN 408355-97-5 CAPLUS
CN Methanesulfonic acid, trifluoro-, compd. with 3-[7-[2-[(2-hydroxyethyl)amino]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)-1H-pyrrole-2,5-dione (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 408355-96-4
CMF C25 H24 N4 O3

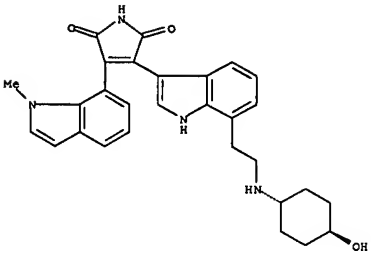




CM 2

CRN 1493-13-6
CMF C H F3 O3 S

RN 408355-98-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[[2-(dimethylamino)ethyl]amino]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

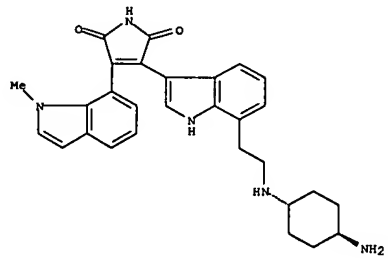


● HCl

RN 408356-01-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(trans-4-aminocyclohexyl)amino]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.

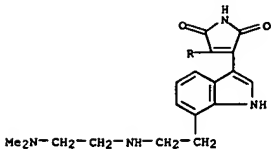
PAGE 1-A

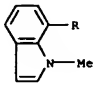


PAGE 2-A

● HCl

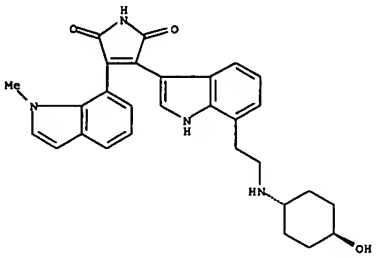
RN 408356-17-2 CAPLUS





RN 408355-99-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(trans-4-hydroxycyclohexyl)amino]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

Relative stereochemistry.

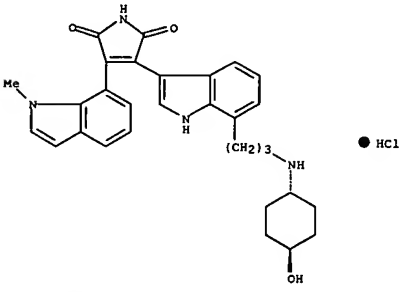


RN 408356-00-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(trans-4-hydroxycyclohexyl)amino]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

Relative stereochemistry.

CN 1H-Pyrrole-2,5-dione, 3-[7-[3-[(trans-4-hydroxycyclohexyl)amino]propyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

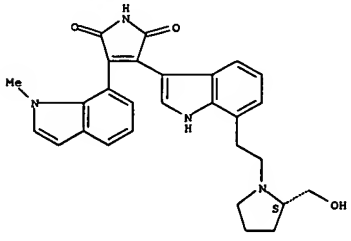
Relative stereochemistry.



● HCl

RN 408496-77-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-[2-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]ethyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



● HCl

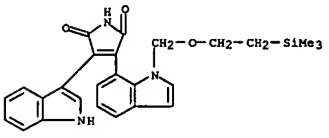
IT 408354-39-2P, 3-(6-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-

yl)pyrrole-2,5-dione 408354-44-9P, 3-(1H-Indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-52-9P, 3-(1H-Indol-3-yl)-4-(1-ethyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-56-3P, 3-(1H-Indol-3-yl)-4-[1-[2-(trimethylsilanylethoxy)methyl]-1H-indol-7-yl]pyrrole-2,5-dione 408354-57-4P, 3-(1H-Indol-7-yl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 408354-59-6P, 3-(6-Bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-61-0P, 3-(6-Trifluoromethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-63-2P, 3-(4-Fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-64-3P, 3-(7-Bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-68-7P, 3-[1-(3-Hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-72-3P, 3-[1-(3-Hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-75-6P, 3-(4-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-77-8P, 3-(5-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-79-0P, 3-(6-Fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-81-4P, 3-(6-Cyano-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-84-7P, 3-(7-Methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-99-4P, 3-[1-(3-Hydroxypropyl)-1H-indol-3-yl]-4-(1H-indol-7-yl)pyrrole-2,5-dione 408355-01-1P, 3-(6-Benzyloxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-07-7P, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 408355-09-9P, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]pyrrole-2,5-dione 408355-16-8P, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(6-fluoro-1H-indol-3-yl)pyrrole-2,5-dione 408355-19-1P, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)pyrrole-2,5-dione 408355-21-5P,

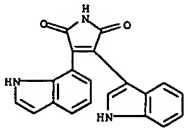
3-(1,5-Dimethyl-1H-indol-7-yl)-4-(6-trifluoromethyl-1H-indol-3-yl)pyrrole-2,5-dione 408355-26-0P, 3-(1-Methyl-5-fluoro-1H-indol-7-yl)-4-(1H-indol-3-yl)pyrrole-2,5-dione 408355-29-3P 408355-43-1P, 3-[1-(2-Hydroxyethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-45-3P, 3-[1-(2-Bromoethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-60-2P, 3-[1-(3-Bromopropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-78-2P 408355-82-8P, 3-(7-(2-Bromoethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408356-07-0P, 3-[7-(3-Hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408356-08-1P, 3-[7-(3-Bromopropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408356-31-0P, 3-(6-Methyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408356-33-2P 408356-37-6P, 3-(5-Trifluoromethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408356-43-4P, 3-(6-Ethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408356-45-6P, 3-(5-Bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408356-48-9P, 3-(6-Ethoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408356-54-7P 408356-60-5P, N-(2-Hydroxyethyl)-N-[[3-[4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrol-3-yl]-1H-indol-7-yl]methyl]acetamide 408356-62-7P, 3-(1H-Indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)pyrrole-2,5-dione 408358-49-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

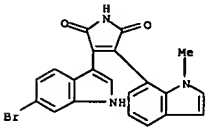
(intermediate; prepn. and use of indolo-pyrrolo-carbazole derivs. as inhibitors of CDK4 kinase and methods for treating proliferative diseases)



RN 408354-57-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1H-indol-7-yl)- (9CI) (CA INDEX NAME)

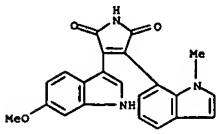


RN 408354-59-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

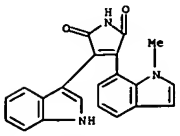


RN 408354-61-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[6-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

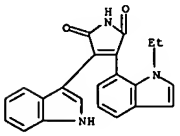
RN 408354-39-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



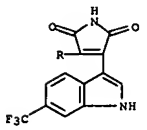
RN 408354-44-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



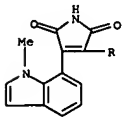
RN 408354-52-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-ethyl-1H-indol-7-yl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

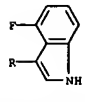


RN 408354-56-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[1-[[2-(trimethylsilyl)ethoxy]methyl]-1H-indol-7-yl]- (9CI) (CA INDEX NAME)

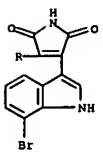


RN 408354-63-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

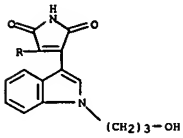




RN 408354-64-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

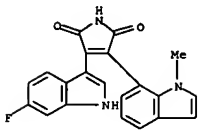


RN 408354-68-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

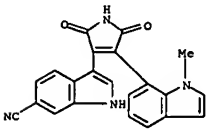


RN 408354-72-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

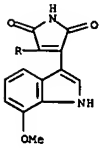
RN 408354-79-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-fluoro-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

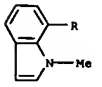


RN 408354-81-4 CAPLUS
CN 1H-Indole-6-carbonitrile, 3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]- (9CI) (CA INDEX NAME)

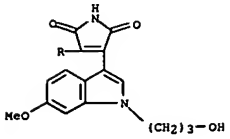


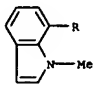
RN 408354-84-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(7-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



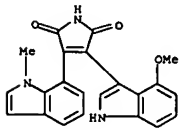


RN 408354-99-4 CAPLUS

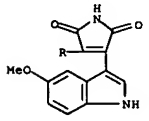




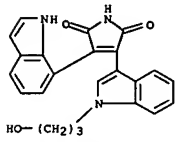
RN 408354-75-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



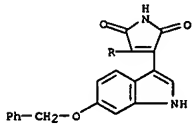
RN 408354-77-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



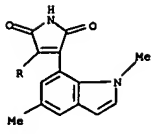
RN 408354-78-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1H-indol-7-yl)- (9CI) (CA INDEX NAME)

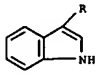


RN 408355-01-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[6-(phenylmethoxy)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

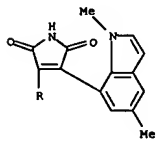


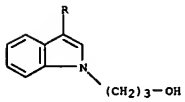
RN 408355-07-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



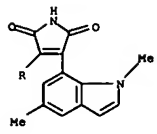


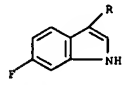
RN 408355-09-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



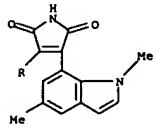


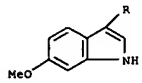
RN 408355-16-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-(6-fluoro-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



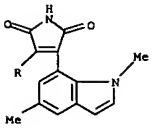


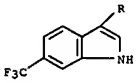
RN 408355-19-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



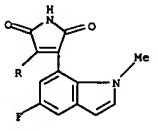


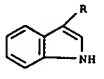
RN 408355-21-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-[6-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



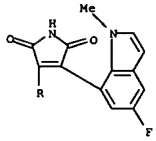


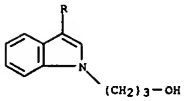
RN 408355-26-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-1-methyl-1H-indol-7-yl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)



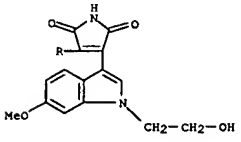


RN 408355-29-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-1-methyl-1H-indol-7-yl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

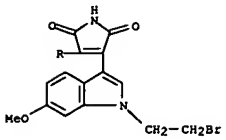


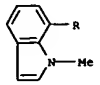


RN 408355-43-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(2-hydroxyethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

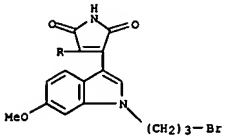


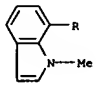
RN 408355-45-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(2-bromoethyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)





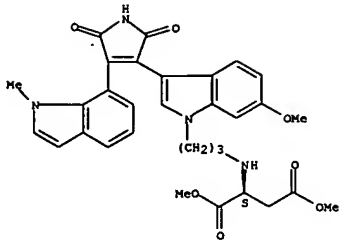
RN 408355-60-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-bromopropyl)-6-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



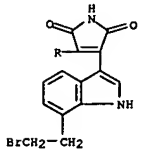


RN 408355-78-2 CAPLUS
CN L-Aspartic acid, N-[3-[3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-6-methoxy-1H-indol-1-yl]propyl]-, dimethyl ester (9CI) (CA INDEX NAME)

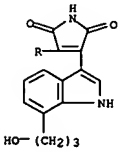
Absolute stereochemistry.



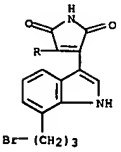
RN 408355-82-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(2-bromoethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



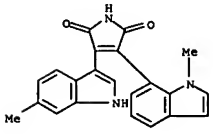
RN 408356-07-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



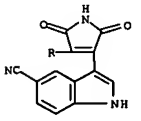
RN 408356-08-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(3-bromopropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

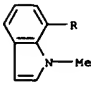


RN 408356-31-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-(6-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

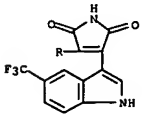


RN 408356-33-2 CAPLUS
CN 1H-Indole-5-carbonitrile, 3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]- (9CI) (CA INDEX NAME)

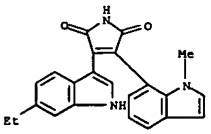




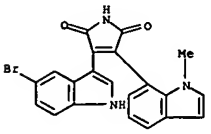
RN 408356-37-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-[5-(trifluoromethyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



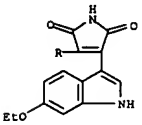
RN 408356-43-4 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(6-ethyl-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-
(9CI) (CA INDEX NAME)

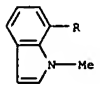


RN 408356-45-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(5-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-
(9CI) (CA INDEX NAME)



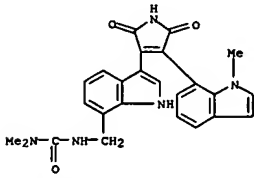
RN 408356-48-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(6-ethoxy-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



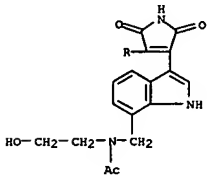


RN 408356-54-7 CAPLUS

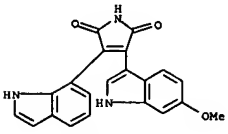
CN Urea,
N'-[[3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-7-yl]methyl]-N,N-dimethyl- (9CI) (CA INDEX NAME)



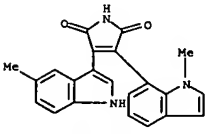
RN 408356-60-5 CAPLUS
CN Acetamide, N-[[3-[2,5-dihydro-4-(1-methyl-1H-indol-7-yl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-7-yl]methyl]-N-(2-hydroxyethyl)- (9CI) (CA INDEX NAME)



RN 408356-62-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-7-yl)-4-(6-methoxy-1H-indol-3-yl)-
(9CI)
(CA INDEX NAME)

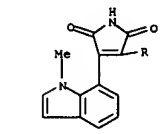


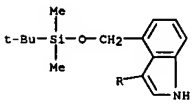
RN 408358-49-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-7-yl)-4-(5-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



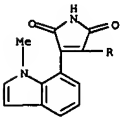
IT 408354-86-9, 3-[4-(((tert-Butyldimethylsilyl)oxy)methyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-88-1, 3-(4-Bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-91-6, 3-[1-(3-Hydroxypropyl)-4-hydroxymethyl-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-93-8, 3-[1-(3-Hydroxypropyl)-4-bromo-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408354-95-0, 3-[1-(3-Hydroxypropyl)-4-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione 408355-35-1, 3-(1,5-Dimethyl-1H-indol-7-yl)-4-(1-methyl-1H-indol-3-yl)pyrrole-2,5-dione 408355-83-9, 3-[7-(2-Hydroxyethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)pyrrole-2,5-dione
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation and use of indolo-pyrrolo-carbazole derivs. as inhibitors of CDK4 kinase and methods for treating proliferative diseases)

RN 408354-86-9 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[4-[[[(1,1-dimethylethyl)dimethylsilyl]oxy]methyl]-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

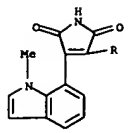


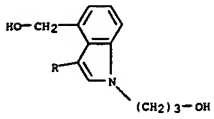


RN 408354-88-1 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(4-bromo-1H-indol-3-yl)-4-(1-methyl-1H-indol-7-yl)-
(9CI) (CA INDEX NAME)

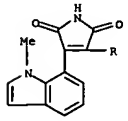


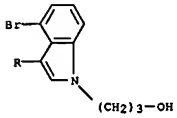
RN 408354-91-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[4-(hydroxymethyl)-1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



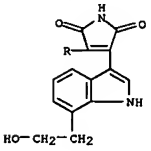


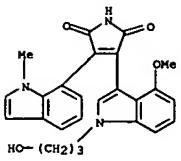
RN 408354-93-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-bromo-1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)



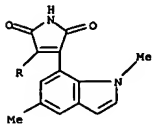


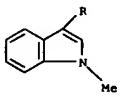
RN 408354-95-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-4-methoxy-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)





RN 408355-35-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,5-dimethyl-1H-indol-7-yl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)





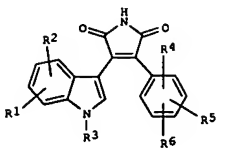
RN 408355-83-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[7-(2-hydroxyethyl)-1H-indol-3-yl]-4-(1-methyl-1H-indol-7-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:107338 CAPLUS
DOCUMENT NUMBER: 136:167378
TITLE: Preparation of 3-indolyl-4-phenyl-1H-pyrrole-2,5-dione derivatives as inhibitors of glycogen synthase kinase-3beta for therapeutic agents
INVENTOR(S): Gong, Leyi; Grupe, Andrew; Peltz, Gary Allen
PATENT ASSIGNEE(S): F. Hoffmann-La Roche A.-G., Switz.
SOURCE: PCT Int. Appl., 105 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002010158	A2	20020207	WO 2001-EP8293	20010718
WO 2002010158	A3	20020516		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2417277	AA	20020207	CA 2001-2417277	20010718
EP 1307447	A2	20030507	EP 2001-974083	20010718
EP 1307447	B1	20041215		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
BR 2001012965	A	20030708	BR 2001-12965	20010718
JP 2004505078	T2	20040219	JP 2002-515887	20010718
NZ 523462	A	20040924	NZ 2001-523462	20010718
AT 284885	E	20050115	AT 2001-974083	20010718
ES 2233691	T3	20050616	ES 2001-1974083	20010718
US 2002052397	A1	20020502	US 2001-916706	20010727
US 6479490	B2	20021112		
US 2002188018	A1	20021212	US 2002-139410	20020506
ZA 2003000216	A	20040408	ZA 2003-216	20030108
NO 2003000328	A	20030122	NO 2003-328	20030122
HK 1058670	A1	20050506	HK 2004-101445	20040227
PRIORITY APPLN. INFO.:			US 2000-221058P	P 20000727
			WO 2001-EP8293	W 20010718
			US 2001-916706	A1 20010727

OTHER SOURCE(S): MARPAT 136:167378
GI



I

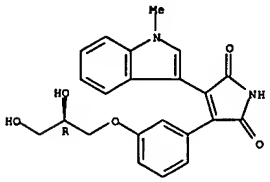
AB The title compds. [I; R1, R2 = H, alkyl, halogen, haloalkyl, alkylthio, HO, alkoxy, cyano, nitro, amino, acylamino, monoalkylamino, or dialkylamino; R3 represents hydrogen, alkyl, cycloalkyl, heteroalkyl, CHO, alkylcarbonyl, or (un)substituted phenyl; R4, R5 = H, alkyl, halogen, haloalkyl, alkylthio, hydroxy, alkoxy, cyano, nitro, amino, acylamino, monoalkylamino, or dialkylamino; R6 = heteroalkyl, heterocyclyl, heterocyclylalkyl, heteroalkyl-substituted heterocyclyl, heteroalkyl-substituted cycloalkyl, heterosubstituted cycloalkyl, OR8, -S(O)nR8 (wherein n = an integer from 0 to 2; and R8 is heteroalkyl, heteroaralkyl, heterocyclyl, or heterocyclylalkyl), NR9R10 (wherein R9 = hydrogen, alkyl; R10 = heterosubstituted cycloalkyl, heteroalkyl, heteroaralkyl, heterocyclyl, or heterocyclylalkyl), or -X-(alkylene)-Y-Z (wherein X = a covalent bond, O, NH, or S(O)n; where n = an integer from 0 to 2; Y = O, NH, or S and Z = heteroalkyl or SiR11(R12)(R13) (where R11, R12, R13 are independently hydrogen or alkyl)), or R6 together with adjacent R4 forms a methylenedioxy or ethylenedioxy group] or pharmaceutically acceptable salts thereof are prepared Owing to the inhibitory activity against glycogen synthase kinase-3β (GSK-3β), these compds. may be used for the treatment of GSK-3β mediated diseases. More specifically, they are used for the treatment of GSK-3β mediated diseases selected from Alzheimer's disease, obesity, diabetes, atherosclerotic cardiovascular disease, polycystic ovary syndrome, syndrome X, ischemia, traumatic brain injury, bipolar disorder, immunodeficiency, cancer, allergy, and asthma in a mammal. The present inhibitor of GSK-3β is also used for the treatment of a disease characterized by an excess of CD4+Th2 cytokines, which is asthma, allergy or allergic rhinitis or for the treatment of a disease characterized by an excess IgE production, which is asthma, allergy or allergic rhinitis. The GSK-3β inhibitor is preferably at least 10 fold more selective for GSK-3β relative to PKC. Thus, Mitsunobu reaction of Me 3-hydroxyphenylacetate with 2-chloroethanol using Ph3P and diisopropyl azodicarboxylate in THF at room temperature overnight gave Me 3-(2-chloroethoxy)phenylacetate which was saponified with aqueous LiOH and treated with AcOH to give 3-(2-chloroethoxy)phenylacetic acid (II) which was converted into 3-(1-methylindol-3-yl)-4-[3-(2-aminoethyloxy)-phenyl]-1H-pyrrole-2,5-dione (III) in 4 steps. III in vitro showed IC50 of 0.02 μM against GSK-3β.

IT **396090-78-1P 396091-05-7P**
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

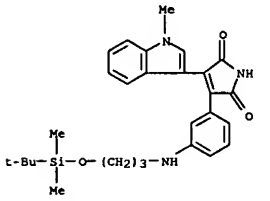
(intermediate; prepn. of (indolylphenyl)-1H-pyrroledione derivs. as inhibitors of glycogen synthase kinase-3β for therapeutic agents)

RN 396090-78-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

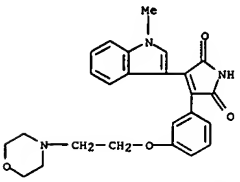


RN 396091-05-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[3-[[(1,1-dimethylethyl]dimethylsilyl]oxy]propyl]amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



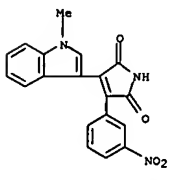
IT **396090-83-8P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(intermediate; preparation of (indolylphenyl)-1H-pyrroledione derivs. as inhibitors of glycogen synthase kinase-3β for therapeutic agents)

RN 396090-83-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-[2-(4-morpholinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)

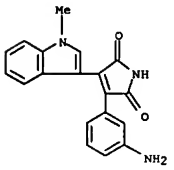


IT **125314-03-6P 125314-13-8P 396090-84-9P**
396090-95-2P 396091-00-2P 396091-06-8P
396091-14-8P 396091-15-9P 396091-19-3P
396091-20-6P 396091-31-9P 396091-32-0P
396091-33-1P 396091-40-0P 396091-46-6P
396091-47-7P 396091-56-8P 396091-62-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of (indolylphenyl)-1H-pyrroledione derivs. as inhibitors of glycogen synthase kinase-3β for therapeutic agents)

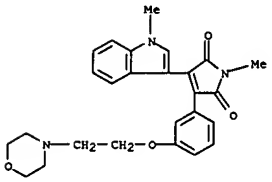
RN 125314-03-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



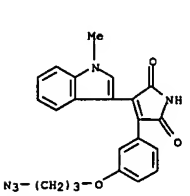
RN 125314-13-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



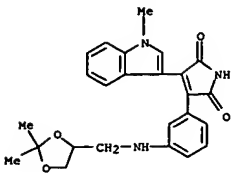
RN 396090-84-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-[3-[2-(4-morpholinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)



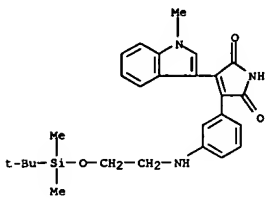
RN 396090-95-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(3-azidopropoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



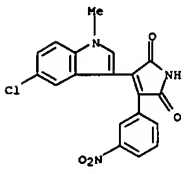
RN 396091-00-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(2,2-dimethyl-1,3-dioxolan-4-yl)methyl]amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



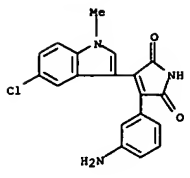
RN 396091-06-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[2-[[(1,1-dimethylethyl)dimethylsilyl]oxy]ethyl]amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



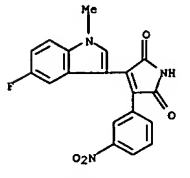
RN 396091-14-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



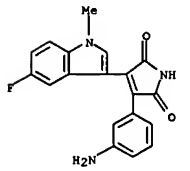
RN 396091-15-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-chloro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



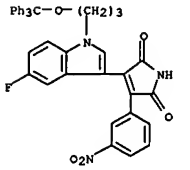
RN 396091-19-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-fluoro-1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



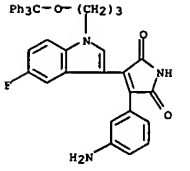
RN 396091-20-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



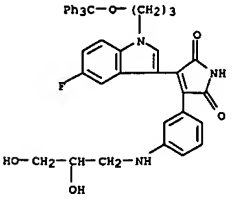
RN 396091-31-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[5-fluoro-1-[3-(triphenylmethoxy)propyl]-1H-indol-3-yl]-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



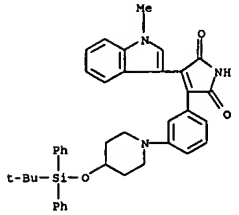
RN 396091-32-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-[5-fluoro-1-[3-(triphenylmethoxy)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



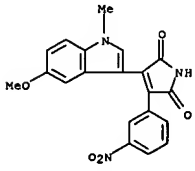
RN 396091-33-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-[5-fluoro-1-[3-(triphenylmethoxy)propyl]-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



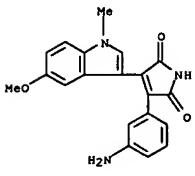
RN 396091-40-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[4-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-1-piperidinyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-46-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-methoxy-1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)

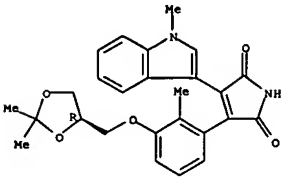


RN 396091-47-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(5-methoxy-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



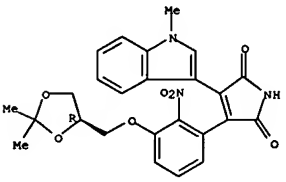
RN 396091-56-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]-2-methylphenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



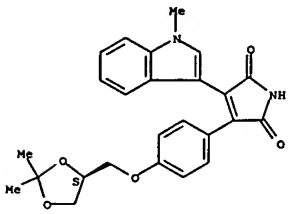
RN 396091-62-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]-
2-nitrophenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

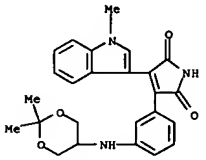


IT 396090-76-9P 396091-02-4P
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of (indolylphenyl)-1H-pyrroledione derivs. as inhibitors of
glycogen synthase kinase-3β for therapeutic agents)
RN 396090-76-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



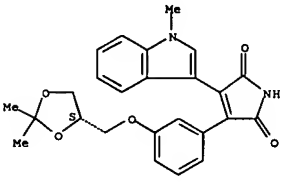
RN 396091-02-4 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[(2,2-dimethyl-1,3-dioxan-5-yl)amino]phenyl]-4-
(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



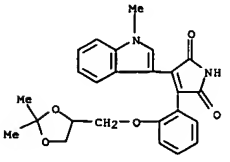
IT 396090-71-4P 396090-75-8P 396090-77-0P
396090-80-5P 396090-81-6P 396090-82-7P
396090-86-1P 396090-87-2P 396090-90-7P
396090-91-8P 396090-92-9P 396090-96-3P
396090-97-4P 396090-98-5P 396091-01-3P
396091-03-5P 396091-04-6P 396091-07-9P
396091-08-0P 396091-09-1P 396091-10-4P
396091-11-5P 396091-12-6P 396091-16-0P
396091-21-7P 396091-24-0P 396091-25-1P
396091-26-2P 396091-27-3P 396091-28-4P
396091-29-5P 396091-41-1P 396091-42-2P
396091-43-3P 396091-44-4P 396091-48-8P
396091-49-9P 396091-51-3P 396091-57-9P
396091-63-7P 396091-64-8P 396091-65-9P
396091-66-0P 396091-67-1P 396091-68-2P
396091-69-3P 396091-70-6P 396091-71-7P
396091-72-8P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (indolylphenyl)-1H-pyrroledione derivs. as inhibitors of
glycogen synthase kinase-3β for therapeutic agents)

RN 396090-71-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(4S)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

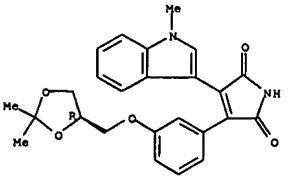


RN 396090-75-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[(2,2-dimethyl-1,3-dioxolan-4-yl)methoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



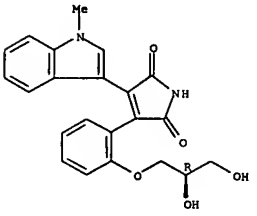
RN 396090-77-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



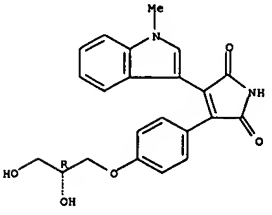
RN 396090-80-5 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[2-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



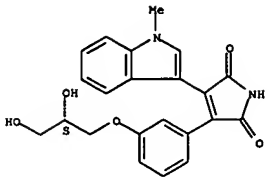
RN 396090-81-6 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[4-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

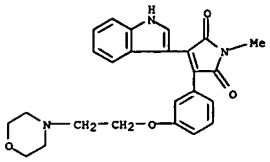


RN 396090-82-7 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[(2S)-2,3-dihydroxypropoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

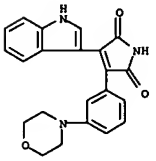
Absolute stereochemistry.



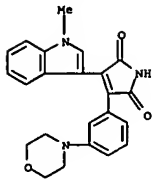
RN 396090-86-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-1-methyl-4-[3-[2-(4-morpholinyl)ethoxy]phenyl]- (9CI) (CA INDEX NAME)



RN 396090-87-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-[3-(4-morpholinyl)phenyl]-(9CI)
(CA INDEX NAME)

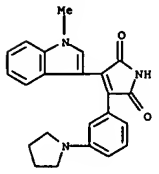


RN 396090-90-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(4-morpholinyl)phenyl]-, monohydrochloride (9CI) (CA INDEX NAME)

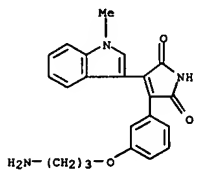


● HCl

RN 396090-91-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(1-pyrrolidinyl)phenyl]- (9CI) (CA INDEX NAME)

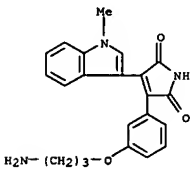


RN 396090-92-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(3-aminopropoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



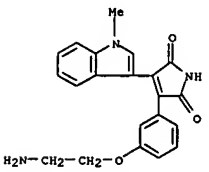
RN 396090-96-3 CAPLUS

CN 1H-Pyrrole-2,5-dione, 3-[3-(3-aminopropoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

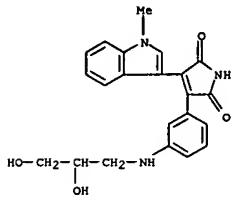


● HCl

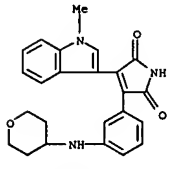
RN 396090-97-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(2-aminoethoxy)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



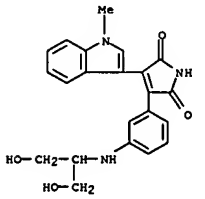
RN 396090-98-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



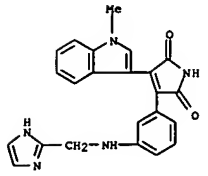
RN 396091-01-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-[(tetrahydro-2H-pyran-4-yl)amino]phenyl]- (9CI) (CA INDEX NAME)



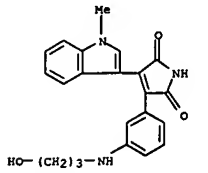
RN 396091-03-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[2-hydroxy-1-(hydroxymethyl)ethyl]amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



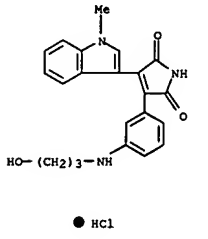
RN 396091-04-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(1H-imidazol-2-ylmethyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



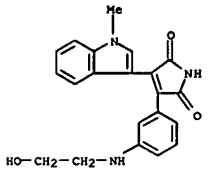
RN 396091-07-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(3-hydroxypropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



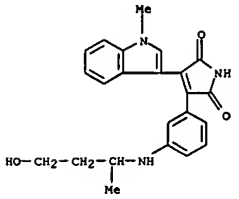
RN 396091-08-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(3-hydroxypropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



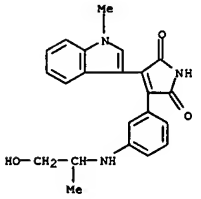
RN 396091-09-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2-hydroxyethyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



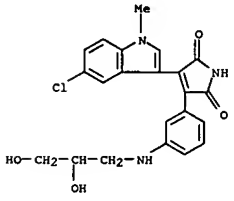
RN 396091-10-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(3-hydroxy-1-methylpropyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



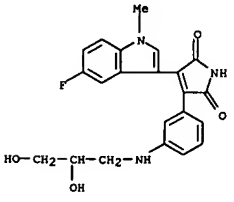
RN 396091-11-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2-hydroxy-1-methylethyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-12-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-methyl-1H-indol-3-yl)-4-[3-[(2,3-dihydroxypropyl)amino]phenyl]- (9CI) (CA INDEX NAME)

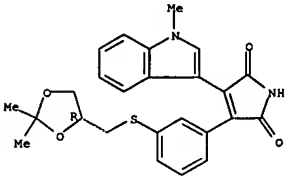


RN 396091-16-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



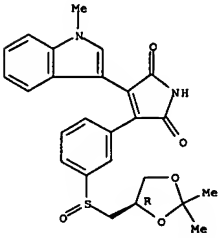
RN 396091-21-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl]thio]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



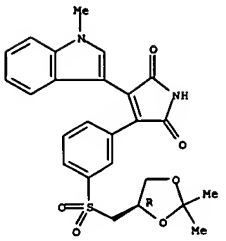
RN 396091-24-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl]sulfinyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



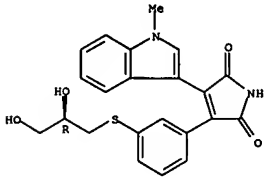
RN 396091-25-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methyl]sulfonyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



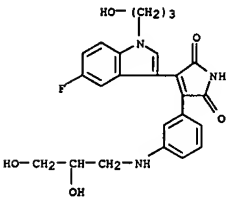
RN 396091-26-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(2R)-2,3-dihydroxypropyl]thio]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

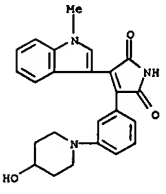


RN 396091-27-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(2R)-2,3-dihydroxypropyl]sulfinyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

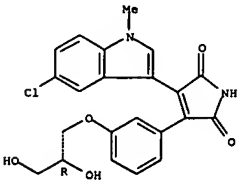


RN 396091-41-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(4-hydroxy-1-piperidinyl)phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

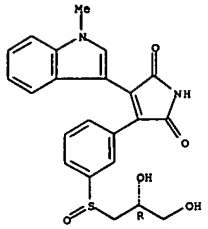


RN 396091-42-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(5-chloro-1-methyl-1H-indol-3-yl)-4-[3-[(2R)-2,3-dihydroxypropoxy]phenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

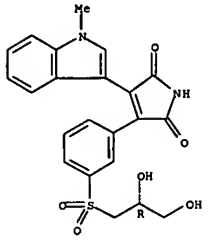


RN 396091-43-3 CAPLUS



RN 396091-28-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(2R)-2,3-dihydroxypropyl]sulfonyl]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

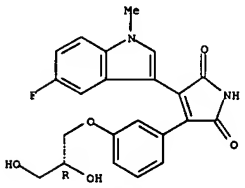
Absolute stereochemistry.



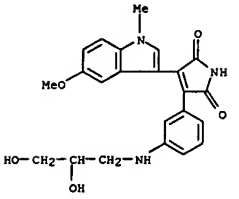
RN 396091-29-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-[5-fluoro-1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropoxy]phenyl]-4-(5-fluoro-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

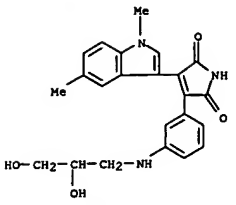
Absolute stereochemistry.



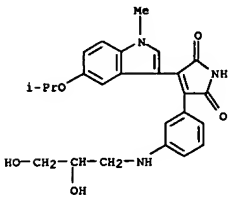
RN 396091-44-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(5-methoxy-1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-48-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-(1,5-dimethyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

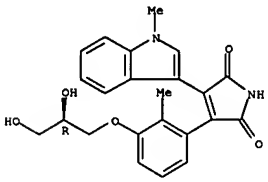


RN 396091-49-9 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[(2,3-dihydroxypropyl)amino]phenyl]-4-[1-methyl-
5-(1-methylethoxy)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)



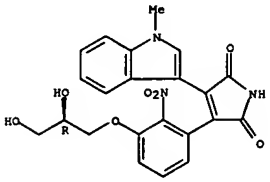
RN 396091-51-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2R)-2,3-dihydroxypropoxy]-2-methylphenyl]-4-
(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

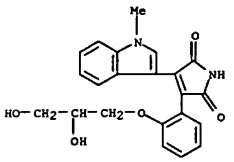


RN 396091-57-9 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[(2R)-2,3-dihydroxypropoxy]-2-nitrophenyl]-4-(1-
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

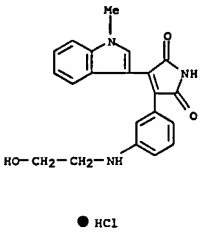
Absolute stereochemistry.



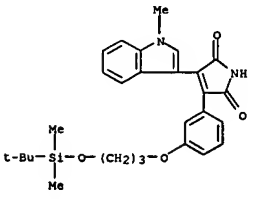
RN 396091-63-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-(2,3-dihydroxypropoxy)phenyl]-4-(1-methyl-1H-
indol-3-yl)- (9CI) (CA INDEX NAME)



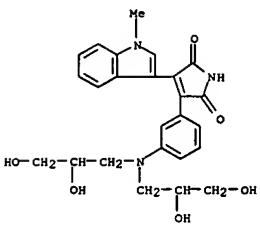
RN 396091-64-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(2-hydroxyethyl)amino]phenyl]-4-(1-methyl-1H-
indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



RN 396091-65-9 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[3-[3-[[(1,1-dimethylethyl)dimethylsilyl]oxy]propo
xy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

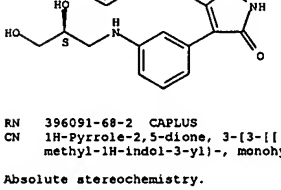


RN 396091-66-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-(bis(2,3-dihydroxypropyl)amino)phenyl]-4-(1-
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



RN 396091-67-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(2S)-2,3-dihydroxypropyl]amino]phenyl]-4-(1-
methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

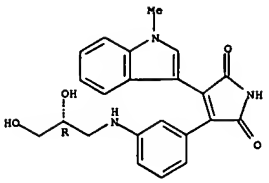
Absolute stereochemistry.



RN 396091-68-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[[(2R)-2,3-dihydroxypropyl]amino]phenyl]-4-(1-
methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)

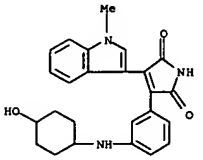
Absolute stereochemistry.

L6 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

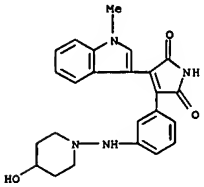


● HCl

RN 396091-69-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(4-hydroxycyclohexyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

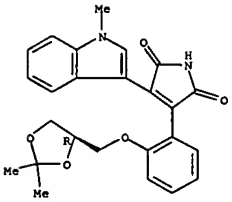


RN 396091-70-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[3-[(4-hydroxy-1-piperidinyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

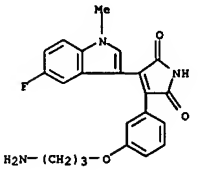


RN 396091-71-7 CAPLUS

L6 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

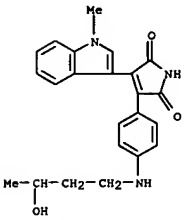


L6 ANSWER 43 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 1H-Pyrrole-2,5-dione, 3-[3-(3-aminopropoxy)phenyl]-4-(5-fluoro-1-methyl-1H-indol-3-yl)-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 396091-72-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[4-[(3-hydroxybutyl)amino]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



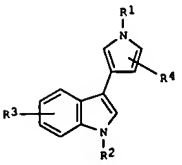
IT 396090-79-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reactant; preparation of (indolylphenyl)-1H-pyrroledione derivs. as inhibitors of glycogen synthase kinase-3β for therapeutic agents)
RN 396090-79-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[2-[[(4R)-2,2-dimethyl-1,3-dioxolan-4-yl]methoxy]phenyl]-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

L6 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:747780 CAPLUS
DOCUMENT NUMBER: 135:303771
TITLE: Preparation of indolylpyrrole derivatives and cell death inhibitors
INVENTOR(S): Asakai, Rei; Sodeoka, Mikiko; Katoh, Miho
PATENT ASSIGNEE(S): Sagami Chemical Research Center, Japan
SOURCE: PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001074807	A1	20011011	WO 2001-JP2584	20010328
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2001044596	A5	20011015	AU 2001-44596	20010328
EP 1275646	A1	20030115	EP 2001-917558	20010328
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
US 2003087949	A1	20030508	US 2002-239821	20020926
PRIORITY APPLN. INFO.:			JP 2000-94908 A	20000330
			WO 2001-JP2584 W	20010328

OTHER SOURCE(S): MARPAT 135:303771
GI



I

AB Indolylpyrrole derivs. represented by the following general formula [I; R1, R2 = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, acyl, acyloxy, alkoxycarbonyl, aryloxycarbonyl, alkylthiocarbonyl, arylthiocarbonyl, aminocarbonyl, aminocarbonyloxy, alkylsulfonyl, arylsulfonyl, alkoxy, aryloxy, or amino, hydroxy; R3 = groups listed in R1 and R2, (un)substituted alkylthiocarbonyloxy, arylthiocarbonyloxy, alkylthio, or

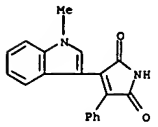
L6 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

arylthio, alkylsulfinyl, arylsulfinyl, CO2H, oxysulfonyl, cyano, NO2, halo; R4 = groups listed in R3, excluding oxysulfonyl; or R1 and R3, R1 and R4, R2 and R4, R3 and R4, R2 and R3, or two R3s or R4s together form an (un)substituted hydrocarbon chain optionally contg. heteroatoms; some provisos given] are prepd. These compds. I are useful in inhibiting cell death and expected as preventives and remedies for the progress of various diseases wherein cell death relates to the progress and worsening thereof.

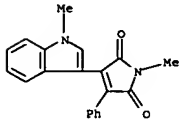
Above diseases include (1) neurodegenerative diseases such as Alzheimer's disease, spinal muscular atrophy (SMA), amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's disease, pigmentary degeneration of the retina, glaucoma, cerebellar degeneration, (2) neonatal kernicterus, (3) cerebral ischemia and delayed neuronal death (DND) after cerebral ischemia, etc. Also claimed are cell death inhibitors, drugs, and preservatives for cells, tissues and organs which contain, as the active ingredient, these derivs. I, or pharmaceutically acceptable salts thereof. Thus, 3-(1H-indol-3-yl)-1-methyl-2,5-dioxopyrrolidine was reduced by diisobutylaluminum hydride in THF at room temp. for 2 h to give 60.2% 3-(1H-indol-3-yl)-1-methylpyrrole (II). II in vitro inhibited the sodium nitroprusside-stimulated apoptosis of porcine ovarian granulosa cells (POGC) and exhibited ≥95% cell survival rate.

IT **125313-97-5P 327602-10-8P 365543-43-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of indolylpyrrole derivs. as cell death inhibitors for treatment and prevention of progress of various diseases related to cell death)

RN 125313-97-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

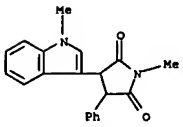


RN 327602-10-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



L6 ANSWER 44 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

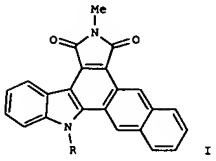
RN 365543-43-7 CAPLUS
CN 2,5-Pyrrolidinedione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



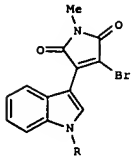
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:674567 CAPLUS
DOCUMENT NUMBER: 136:85738
TITLE: Synthesis of naphthopyrrolo[3,4-c]carbazoles
AUTHOR(S): Routier, S.; Coudert, G.; Merour, J.-Y.
CORPORATE SOURCE: Institut de Chimie Organique et Analytique, CNRS, Orleans, 45067, Fr.
SOURCE: Tetrahedron Letters (2001), 42(40), 7025-7028
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:85738
GI



I



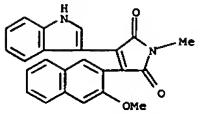
II

AB New naphthocarbazoles I (R = H, SO2Ph, Boc) were built from protected 3-(3-indolyl)-4-bromo-N-methylmaleimides II (R = SO2Ph, Boc) in four steps using palladium-catalyzed cross-coupling reactions such as the Suzuki reaction of 3-methoxy-2-boronic acid and intramol. Heck cyclization.

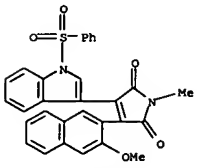
IT **386235-54-7P 386235-55-8P 386235-57-0P**
386235-58-1P 386235-59-2P 386235-60-5P
386235-61-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of naphthopyrrolo[3,4-c]carbazoles)

RN 386235-54-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(3-methoxy-2-naphthalenyl)-1-methyl- (9CI) (CA INDEX NAME)

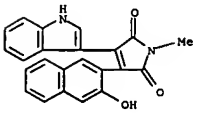
L6 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 386235-55-8 CAPLUS
CN 1H-Indole, 3-[2,5-dihydro-4-(3-methoxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

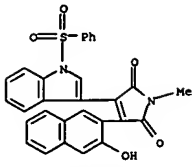


RN 386235-57-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-hydroxy-2-naphthalenyl)-4-(1H-indol-3-yl)-1-methyl- (9CI) (CA INDEX NAME)

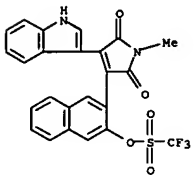


RN 386235-58-1 CAPLUS
CN 1H-Indole, 3-[2,5-dihydro-4-(3-hydroxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-1-(phenylsulfonyl)- (9CI) (CA INDEX NAME)

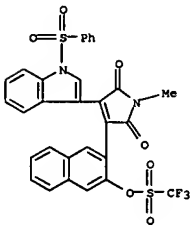
L6 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 386235-59-2 CAPLUS
CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-4-(1H-indol-3-yl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI) (CA INDEX NAME)

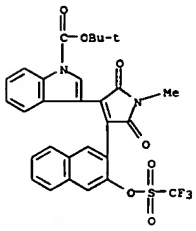


RN 386235-60-5 CAPLUS
CN Methanesulfonic acid, trifluoro-, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[1-(phenylsulfonyl)-1H-indol-3-yl]-1H-pyrrol-3-yl]-2-naphthalenyl ester (9CI)
(CA INDEX NAME)

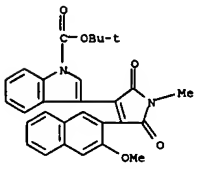


RN 386235-61-6 CAPLUS

L6 ANSWER 45 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
CN 1H-Indole-1-carboxylic acid, 3-[2,5-dihydro-1-methyl-2,5-dioxo-4-[3-[[(trifluoromethyl)sulfonyl]oxy]-2-naphthalenyl]-1H-pyrrol-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



IT 386235-56-9P
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of naphthopyrrolo[3,4-c]carbazoles)
RN 386235-56-9 CAPLUS
CN 1H-Indole-1-carboxylic acid, 3-[2,5-dihydro-4-(3-methoxy-2-naphthalenyl)-1-methyl-2,5-dioxo-1H-pyrrol-3-yl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

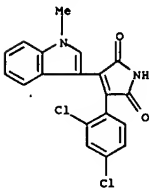
L6 ANSWER 46 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:490373 CAPLUS
DOCUMENT NUMBER: 135:298585
TITLE: Inhibition of GSK-3 selectively reduces glucose-6-phosphatase and phosphoenolpyruvate carboxykinase gene expression
AUTHOR(S): Lochhead, Pamela A.; Coghlan, Matthew; Rice, Simon Q. J.; Sutherland, Calum
CORPORATE SOURCE: Division of Cell Signalling, School of Life Sciences, University of Dundee, Dundee, DD1 5EH, UK
SOURCE: Diabetes (2001), 50(5), 937-946
CODEN: DIAEA2; ISSN: 0012-1797
PUBLISHER: American Diabetes Association
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A major action of insulin is to regulate the transcription rate of specific genes. The expression of these genes is dramatically altered in type 2 diabetes. For example, the expression of two hepatic genes, glucose-6-phosphatase and PEPCK, is normally inhibited by insulin, but in type 2 diabetes, their expression is insensitive to insulin. An agent that mimics the effect of insulin on the expression of these genes would reduce gluconeogenesis and hepatic glucose output, even in the presence of insulin resistance. The repressive actions of insulin on these genes are dependent on phosphatidylinositol (PI) 3-kinase. However, the mols. that lie between this lipid kinase and the two gene promoters are unknown. Glycogen synthase kinase-3 (GSK-3) is inhibited following activation of PI 3-kinase and protein kinase B. In hepatoma cells, the authors find that selectively reducing GSK-3 activity strongly reduces the expression of both gluconeogenic genes. The effect is at the level of transcription and is observed with induced or basal gene expression. In addition, GSK-3 inhibition does not result in the subsequent activation of protein kinase B or inhibition of the transcription factor FKHR, which are candidate regulatory mols. for these promoters. Thus, GSK-3 activity is required for basal activity of each promoter. Inhibitors of GSK-3 should therefore reduce hepatic glucose output, as well as increase the synthesis of glycogen from L-glucose. These findings indicate that GSK-3 inhibitors may have greater therapeutic potential for lowering blood glucose levels and treating type 2 diabetes than previously realized.

IT 280744-09-4, SB-216763
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(inhibition of GSK-3 (glycogen synthase kinase-3) selectively reduces glucose phosphatase and phosphoenolpyruvate carboxykinase gene expression in relation to insulin resistance and treating type 2 diabetes)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

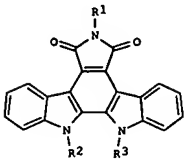
L6 ANSWER 46 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 47 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:292783 CAPLUS
DOCUMENT NUMBER: 135:122654
TITLE: Phenyliodine(III) bis(trifluoroacetate)-mediated oxidation of bisindolylmaleimides to indolo[2,3-a]carbazoles
AUTHOR(S): Faul, M. M.; Sullivan, K. A.
CORPORATE SOURCE: Chemical Process Research and Development Division, Lilly Research Laboratories, A Division of Eli Lilly and Company, Indianapolis, IN, 46285, USA
SOURCE: Tetrahedron Letters (2001), 42(19), 3271-3273
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:122654
GI

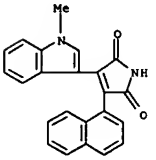


I

AB A novel protocol for the oxidation of bisindolylmaleimides to the corresponding indolo[2,3-a]carbazoles (I) in 15-56% yield with phenyliodine(III) bis(trifluoroacetate) (PIFA) is reported.

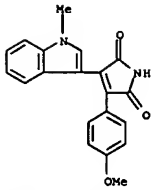
IT 125313-42-0 125313-98-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(failed PIFA-mediated oxidation)

RN 125313-42-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(1-naphthalenyl)-(9CI)
(CA INDEX NAME)



RN 125313-98-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxyphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

L6 ANSWER 47 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 48 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

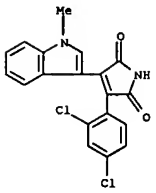
ACCESSION NUMBER: 2001:266655 CAPLUS
DOCUMENT NUMBER: 135:87082
TITLE: Selective small-molecule inhibitors of glycogen synthase kinase-3 activity protect primary neurons from death
AUTHOR(S): Cross, Darren A. E.; Culbert, Ainsley A.; Chalmers, Katy A.; Facci, Laura; Skaper, Stephen D.; Reith, Alastair D.
CORPORATE SOURCE: Neurology Centre of Excellence in Drug Discovery, GlaxoSmithKline Pharmaceuticals, Essex, CM19 5AW, UK
SOURCE: Journal of Neurochemistry (2001), 77(1), 94-102
CODEN: JONRA9; ISSN: 0022-3042
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The phosphatidylinositol 3-kinase (PI 3-kinase)/protein kinase B (PKB; also known as Akt) signaling pathway is recognized as playing a central role in the survival of diverse cell types. Glycogen synthase kinase-3 (GSK-3) is a ubiquitously expressed serine/threonine protein kinase that is one of several known substrates of PKB. PKB phosphorylates GSK-3 in response to insulin and growth factors, which inhibits GSK-3 activity and leads to the modulation of multiple GSK-3 regulated cellular processes. We show that the novel potent and selective small-mol. inhibitors of GSK-3; SB-415286 and SB-216763, protect both central and peripheral nervous system neurons in culture from death induced by reduced PI 3-kinase pathway activity. The inhibition of neuronal death mediated by these compds. correlated with inhibition of GSK-3 activity and modulation of GSK-3 substrates tau and β-catenin. Thus, in addition to the previously assigned roles of GSK-3, our data provide clear pharmacol. and biochem. evidence that selective inhibition of the endogenous pool of GSK-3 activity in primary neurons is sufficient to prevent death, implicating GSK-3 as a physiol. relevant principal regulatory target of the PI 3-kinase/PKB neuronal survival pathway.

IT 280744-09-4, SB 216763
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(selective small-mol. inhibitors of glycogen synthase kinase-3 activity protect primary neurons from death)

RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)

L6 ANSWER 48 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



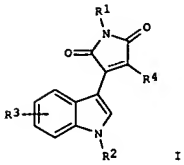
REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:152487 CAPLUS
DOCUMENT NUMBER: 134:193340
TITLE: Preparation of (3-indolyl)maleimide and -succinimide derivatives as apoptosis inhibitors and drugs containing them for inhibiting apoptosis
INVENTOR(S): Asakai, Rei; Sodeoka, Mikiko; Fujita, Mikako; Katoh, Miho
PATENT ASSIGNEE(S): Sagami Chemical Research Center, Japan
SOURCE: PCT Int. Appl., 43 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001013916	A1	20010301	WO 2000-JP5496	20000817
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 2000065936	A5	20010319	AU 2000-65936	20000817
EP 1224932	A1	20020724	EP 2000-953455	20000817
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				

PRIORITY APPLN. INFO.: JP 1999-233465 A 19990820
WO 2000-JP5496 W 20000817

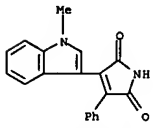
OTHER SOURCE(S): MARPAT 134:193340
GI



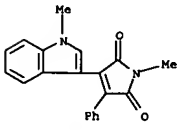
I

AB Described are apoptosis (cell death) inhibitors, drugs, and preservatives for cells, tissues and organs which contain as the active ingredient indolylmaleimide derivs. represented by general formula [I; R1 = (un)substituted alkyl, alkenyl, or aryl, HO, (un)substituted alkoxy, aryl,

L6 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



IT 327602-10-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of (3-indolyl)maleimide and -succinimide derivs. as apoptosis inhibitors for preventives and remedies for various diseases)
RN 327602-10-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 1-methyl-3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

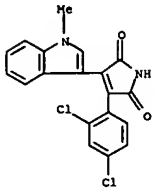


REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 49 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)
or NH2, H; R2 = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, acyl, alkoxycarbonyl, aryloxycarbonyl, alkylthiocarbonyl, arylthiocarbonyl, CONH2, alkylsulfonyl, arylsulfonyl, alkoxy, or aryloxy; R3 (indole substituent at 2,4,5, or 6 position) = H, (un)substituted alkyl, alkenyl, alkynyl, aryl, acyl, alkoxycarbonyl, aryloxycarbonyl, alkylthiocarbonyl, arylthiocarbonyl, CONH2, alkylsulfonyl, arylsulfonyl, alkoxy, aryloxy, alkylthio, or arylthio, HO, CO2H, cyano, NO2, (un)substituted NH2, halo; R4 = H, (un)substituted alkyl, alkenyl, alkynyl, aryl (except 3-indolyl), acyl, alkoxycarbonyl, aryloxycarbonyl, alkylthiocarbonyl, arylthiocarbonyl, CONH2, alkylsulfonyl, arylsulfonyl, alkoxy, aryloxy, alkylthio, or arylthio, HO, CO2H, cyano, NO2, (un)substituted NH2; or R2 and R3, R2 and R4, or R3 and R4 are combined together to form an (un)substituted hydrocarbon chain; the single bond accompanied by a dotted line is a single or double bond] or pharmaceutically acceptable salts thereof. These compds. I are expected as useful as preventives and remedies for various diseases, in the worsening of the symptoms of which cell death participates, such as Alzheimer's disease, spinal muscular atrophy (SMA), amyotrophic lateral sclerosis (ALS), Parkinson's disease, Huntington's disease, pigmentary degeneration of the retina, glaucoma, cerebellar degeneration, and nerve degenerative diseases. They are also useful for the treatment or prevention of worsening the symptoms of diseases such as cerebral ischemia, delayed neuronal death (DND), ischemic heart disease, viral myocarditis, autoimmune myocarditis, heart hypertrophy, heart failure, arrhythmia-originated right-ventricular cardiomyopathy, alc. or viral hepatitis, AIDS, inflammatory skin diseases, hair loss, host-vs.-graft reaction, radiation or chemotherapy disorders, septicemia, bone marrow malformation, insulin-dependent diabetes, or failure of tissue or cells during organ, tissue, or cell transplant. Thus, 2-chloro-3-(1H-indol-3-yl)-N-methylmaleimide was dissolved in DMF and treated with K2CO3 and MeI under stirring at room temp. for 2 h to give 81% 2-chloro-3-(1-methyl-1H-indol-3-yl)-N-methylmaleimide (II). A soln. of tetradecanol in THF was stirred with NaH, followed by adding dropwise a soln. of II in THF, and the resulting mixt. was stirred at room temp. for 2 h to give 2-tetradecyloxy-3-(1-methyl-1H-indol-3-yl)-N-methylmaleimide (III). III showed IC50 of 0.3 μM for inhibiting the sodium nitroprusside (SNP)-induced apoptosis of porcine ovarian granulosa cells.
IT 125313-97-5P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(preparation of (3-indolyl)maleimide and -succinimide derivs. as apoptosis inhibitors for preventives and remedies for various diseases)
RN 125313-97-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

L6 ANSWER 50 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:801145 CAPLUS
DOCUMENT NUMBER: 134:112113
TITLE: Selective small molecule inhibitors of glycogen synthase kinase-3 modulate glycogen metabolism and gene transcription
AUTHOR(S): Coghlan, Matthew P.; Culbert, Ainsley A.; Cross, Darren A. E.; Corcoran, Stacey L.; Yates, John W.; Pearce, Nigel J.; Rausch, Oliver L.; Murphy, Gregory J.; Carter, Paul S.; Cox, Lynne Roxbee; Mills, David; Brown, Murray J.; Haigh, David; Ward, Robert W.; Smith, David G.; Murray, Kenneth J.; Reith, Alastair D.; Holder, Julie C.
CORPORATE SOURCE: Department of Vascular Biology, SmithKline Beecham Pharmaceuticals, Essex, CM19 5AD, UK
SOURCE: Chemistry & Biology (2000), 7(10), 793-803
CODEN: CBOLE2; ISSN: 1074-5521
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background: Glycogen synthase kinase-3 (GSK-3) is a serine/threonine protein kinase, the activity of which is inhibited by a variety of extracellular stimuli including insulin, growth factors, cell specification factors and cell adhesion. Consequently, inhibition of GSK-3 activity has been proposed to play a role in the regulation of numerous signaling pathways that elicit pleiotropic cellular responses. This report describes the identification and characterization of potent and selective small mol. inhibitors of GSK-3. Results: SB-216763 and SB-415286 are structurally distinct maleimides that inhibit GSK-3α in vitro, with Kis of 9 nM and 31 nM resp., in an ATP competitive manner. These compds. inhibited GSK-3β with similar potency. However, neither compound significantly inhibited any member of a panel of 24 other protein kinases. Furthermore, treatment of cells with either compound stimulated responses characteristic of extracellular stimuli that are known to inhibit GSK-3 activity. Thus, SB-216763 and SB-415286 stimulated glycogen synthesis in human liver cells and induced expression of a β-catenin-LEF/TCF regulated reporter gene in HEK293 cells. In both cases, compound treatment was demonstrated to inhibit cellular GSK-3 activity as assessed by activation of glycogen synthase, which is a direct target of this kinase. Conclusions: SB-216763 and SB-415286 are novel, potent and selective cell permeable inhibitors of GSK-3. Therefore, these compds. represent valuable pharmacol. tools with which the role of GSK-3 in cellular signaling can be further elucidated. Furthermore, development of similar compds. may be of use therapeutically in disease states associated with elevated GSK-3 activity such as non-insulin dependent diabetes mellitus and neurodegenerative disease.
IT 280744-09-4, SB 216763
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(selective small mol. maleimide inhibitors of glycogen synthase kinase-3 modulate glycogen metabolism and gene transcription)
RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 50 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



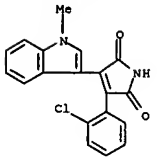
REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L6 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:456876 CAPLUS
DOCUMENT NUMBER: 133:84297
TITLE: Maleimide and carbazole derivatives for the treatment of conditions with a need for the inhibition of glycogen synthase kinase-3 (GSK-3)
INVENTOR(S): Coghlan, Matthew Paul; Holder, Julie Caroline; Reith, Alastair David; Smith, David Glynn
PATENT ASSIGNEE(S): Smithkline Beecham PLC, UK
SOURCE: PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

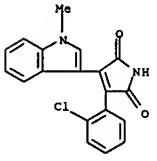
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000038675	A1	20000706	WO 1999-GB4374	19991222
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1140070	A1	20011010	EP 1999-962419	19991222
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
PRIORITY APPLN. INFO.:			GB 1998-28640	A 19981223
			WO 1999-GB4374	W 19991222

OTHER SOURCE(S): MARPAT 133:84297
AB A method of treatment and/or prophylaxis of conditions associated with a need for the inhibition of GSK-3 comprises the administration of certain maleimide or carbazole compds., or pharmaceutically acceptable derivs. thereof. Also provided is the use of such compds. in the manufacture of a medicament for the treatment of conditions associated with the need for GSK-3 inhibition.
IT 125314-07-0 125314-07-0D, derivs. 280744-09-4 280744-09-4D, derivs. 280744-10-7 280744-10-7D , derivs. 280744-11-8 280744-11-8D, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES
(Uses)
(maleimide and carbazole derivs. for treatment of conditions with need for inhibition of glycogen synthase kinase-3)
RN 125314-07-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI)
(CA INDEX NAME)

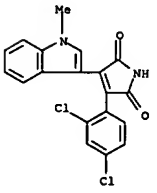
L6 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 125314-07-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI)
(CA INDEX NAME)

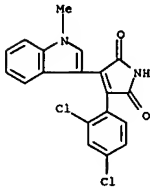


RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

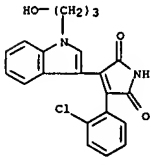


RN 280744-09-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,4-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

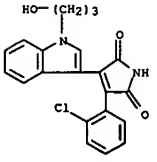
L6 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 280744-10-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

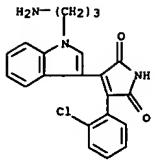


RN 280744-10-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-[1-(3-hydroxypropyl)-1H-indol-3-yl]- (9CI) (CA INDEX NAME)

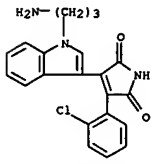


RN 280744-11-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-aminopropyl)-1H-indol-3-yl]-4-(2-chlorophenyl)- (9CI) (CA INDEX NAME)

L6 ANSWER 51 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 280744-11-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-aminopropyl)-1H-indol-3-yl]-4-(2-chlorophenyl)- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

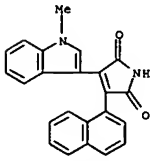
L6 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1999:83376 CAPLUS
DOCUMENT NUMBER: 130:237430
TITLE: A new one step synthesis of maleimides by condensation of glyoxylate esters with acetamides
AUTHOR(S): Faul, Margaret M.; Winneroski, Leonard L.; Krumrich, Christine A.
CORPORATE SOURCE: Chemical Process Research and Development Division, Lilly Research Laboratories, A Division of Eli Lilly and Company, Indianapolis, IN, 46285-4813, USA
SOURCE: Tetrahedron Letters (1999), 40(6), 1109-1112
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 130:237430

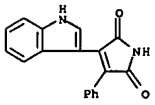
AB Di-Ph, bisheteroaryl, (indolyl)aryl and indolyl(cycloalkyl) maleimides are prepared in one step and 67-99% yield by condensation of glyoxylate esters with acetamides using a 1.0 M solution of potassium tert-butoxide in THF. The mechanism of the reaction is discussed.

IT **125313-42-0P 125313-57-7P 125313-97-5P**
125313-98-6P 150114-23-1P 221233-35-8P
221233-43-8P 221233-51-8P 221233-73-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of maleimides by condensation of glyoxylate esters with acetamides)

RN 125313-42-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

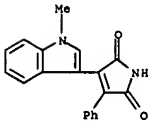


RN 125313-57-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)

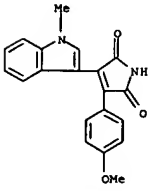


L6 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

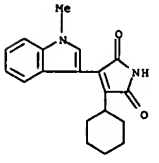
RN 125313-97-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



RN 125313-98-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxyphenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

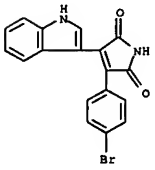


RN 150114-23-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-cyclohexyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

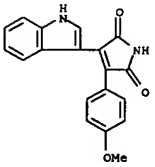


RN 221233-35-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-bromophenyl)-4-(1H-indol-3-yl)- (9CI) (CA INDEX NAME)

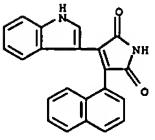
L6 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



RN 221233-43-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(4-methoxyphenyl)- (9CI) (CA INDEX NAME)

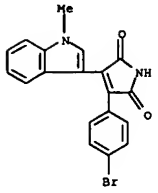


RN 221233-51-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 221233-73-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-bromophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)

L6 ANSWER 52 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

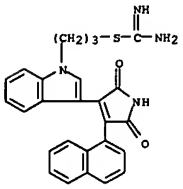
L6 ANSWER 53 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

L6 ANSWER 53 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:338467 CAPLUS
DOCUMENT NUMBER: 122:150861
TITLE: 2-Aryl-indolyl maleimides - novel and potent inhibitors of protein kinase C
AUTHOR(S): Hendricks, Robert T.; Sherman, D.; Strulovici, Berta; Broka, Chris A.
CORPORATE SOURCE: Inst. Org. Chem., Syntex Discovery Res., Palo Alto, CA, 94304, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (1995), 5(1),
67-72
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new class of protein kinase C (PKC) inhibitors is described. These inhibitors were derived from the familiar bis-indolyl maleimide series of inhibitors through a structural rearrangement involving transfer of one aryl ring from the maleimide moiety to the C-2 position of the indole ring remaining attached to that moiety. The resulting compds. are among the most potent known inhibitors of PKC and also show good selectivity for PKC in relation to other kinases. The lead compound in this series possesses antitumor activity in several in vitro and in vivo models.

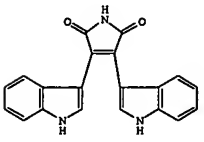
IT 161404-52-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
(preparation of arylindolyl maleimides as novel and potent inhibitors of protein kinase C in relation to antitumor activity)

RN 161404-52-0 CAPLUS
CN Carbamimidothioic acid, 3-[3-[2,5-dihydro-4-(1-naphthalenyl)-2,5-dioxo-1H-pyrrol-3-yl]-1H-indol-1-yl]propyl ester, monohydrobromide (9CI) (CA INDEX NAME)

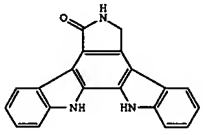


● HBr

L6 ANSWER 54 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:244431 CAPLUS
DOCUMENT NUMBER: 120:244431
TITLE: Oxidative cyclizations with palladium acetate. A short synthesis of staurosporine aglycon
AUTHOR(S): Harris, William; Hill, Christopher H.; Keech, Elizabeth; Malsher, Patrick
CORPORATE SOURCE: Res. Cent., Roche Prod. Ltd., Welwyn Garden City/Herts., AL7 3AY, UK
SOURCE: Tetrahedron Letters (1993), 34(51), 8361-4
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 120:244431
GI



I

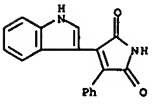


II

AB A palladium acetate mediated oxidative cyclization of arcyriarubin A I has been used as the key step for the syntheses of staurosporine aglycon II and related analogs.

IT 125313-57-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(intramol. palladium acetate oxidative cyclocondensation of)

RN 125313-57-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



L6 ANSWER 55 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:560093 CAPLUS
DOCUMENT NUMBER: 119:160093
TITLE: Preparation of substituted maleimides
INVENTOR(S): Hill, Christopher Huw
PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 540956	A1	19930512	EP 1992-118164	19921023
EP 540956	B1	19970903		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
AT 157664	E	19970915	AT 1992-118164	19921023
ES 2107487	T3	19971201	ES 1992-118164	19921023
ZA 9208340	A	19930504	ZA 1992-8340	19921028
AU 9227419	A1	19930506	AU 1992-27419	19921029
AU 658017	B2	19950330		
CA 2081805	AA	19930505	CA 1992-2081805	19921030
CA 2081805	C	19991214		
JP 05221977	A2	19930831	JP 1992-317907	19921102
JP 2799271	B2	19980917		
CN 1072409	A	19930526	CN 1992-112704	19921103
CN 1041308	B	19981223		
US 5399712	A	19950321	US 1992-971370	19921104
PRIORITY APPLN. INFO.:			GB 1991-23396 A	19911104

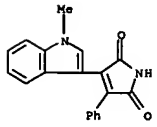
OTHER SOURCE(S): CASREACT 119:160093; MARPAT 119:160093
GI

I

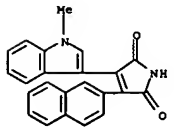
AB Title compds. [I; R1 = alkyl, (hetero)aryl; R2 = H, alkyl, alkoxycarbonyl, (hetero)aryl] were prepared by cyclocondensation of R1COCOX (X = leaning group) with R2CH2C(:NH)YR3 (R3 = alkyl, aryl, trialkylsilyl; Y = O, S) followed by hydrolysis and dehydration steps in a 1-pot process. Thus, R1COCOCl (R1 = 1,2-dimethyl-3-indolyl) was stirred 18 h with R2CH2C(:NH)OCHMe2 (R2 = 1-methyl-3-indolyl)(preparation given) in CH2Cl2 containing ET3N and 4Å mol. sieves after which 4-MeC6H4SO3H was added and stirring continued 1h to give 70% I (R1 and R2 herein given).

IT **125313-97-5P 137467-10-8P 150114-23-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, method for)

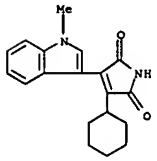
RN 125313-97-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



RN 137467-10-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2-naphthalenyl)-(9CI) (CA INDEX NAME)

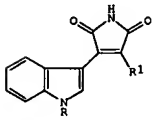


RN 150114-23-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-cyclohexyl-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



L6 ANSWER 56 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1992:41230 CAPLUS
DOCUMENT NUMBER: 116:41230
TITLE: Inhibitors of protein kinase C. 1. 2,3-bisarylmaleimides
AUTHOR(S): Davis, Peter D.; Hill, Christopher H.; Lawton, Geoffrey; Nixon, John S.; Wilkinson, Sandra E.; Hurst, Steven A.; Keech, Elizabeth; Turner, Susan E.
CORPORATE SOURCE: Roche Prod. Ltd., Welwyn Garden City/Herts., AL7 3AY, UK
SOURCE: Journal of Medicinal Chemistry (1992), 35(1), 177-84
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
GI

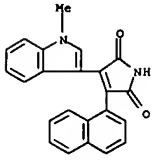


I

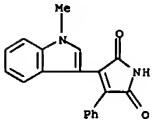
AB A series of novel inhibitors, i.e., maleimides I (R = H, Me; R1 = (un)substituted indolyl, (un)substituted Ph, naphthyl, benzo[b]thien-3-yl, benzo[b]furan-3-yl, 3-pyrrolyl) of protein kinase C (PKC) is described. These maleimides were derived from the structural lead provided by the indolocarbazoles, staurosporine and K252a. Optimum activity required the imide NH, both carbonyl groups, and the olefinic bond of the maleimide ring. Bisindolylmaleimides were the most active and the potency of these was improved by a chloro substituent at the 5-position of one indole ring (IC50 0.11 μM). In a series of (phenylindolyl)maleimides, nitro derivative I (R = Me, R1 = 2-O2NC6H5) was most active (IC50 0.67 μM). Naphthalene compound I (R = Me, R1 = 1-naphthyl) and benzothiphene compound I (R = Me, R2 = benzo[b]thien-3-yl) showed greater than 100-fold selectivity for inhibition of PKC over the closely related cAMP-dependent protein kinase.

IT **125313-42-0P 125313-97-5P 125313-98-6P**
125313-99-7P 125314-00-3P 125314-01-4P
125314-02-5P 125314-03-6P 125314-04-7P
125314-05-8P 125314-06-9P 125314-07-0P
125314-08-1P 125314-09-2P 125314-13-8P
125314-16-1P 125314-20-7P 125314-21-8P
125314-22-9P 125334-48-7P 125334-49-8P
137467-10-8P 137467-15-3P 137467-16-4P
137467-17-5P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and protein kinase C inhibiting activity of)

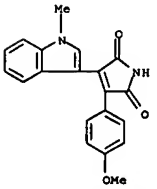
RN 125313-42-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(1-naphthalenyl)-(9CI) (CA INDEX NAME)



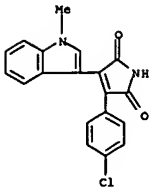
RN 125313-97-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



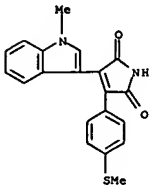
RN 125313-98-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxyphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



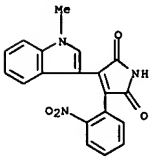
RN 125313-99-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



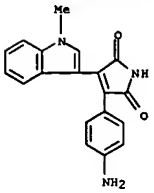
RN 125314-00-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[4-(methylthio)phenyl]- (9CI) (CA INDEX NAME)



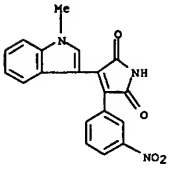
RN 125314-01-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2-nitrophenyl)- (9CI) (CA INDEX NAME)



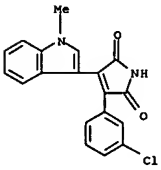
RN 125314-02-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-aminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



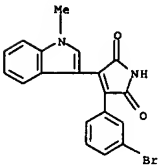
RN 125314-03-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



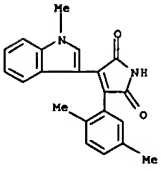
RN 125314-04-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



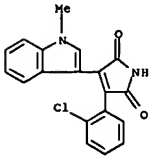
RN 125314-05-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-bromophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



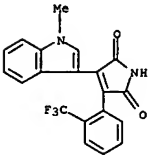
RN 125314-06-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,5-dimethylphenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



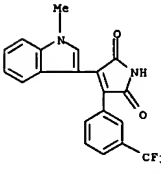
RN 125314-07-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



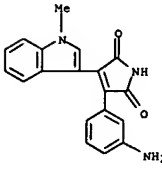
RN 125314-08-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



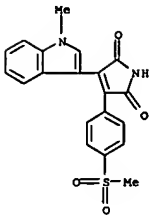
RN 125314-09-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



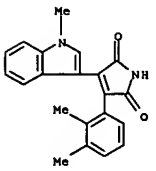
RN 125314-13-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



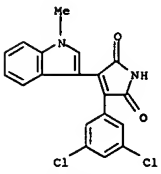
RN 125314-16-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



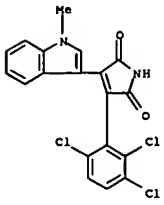
RN 125314-20-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dimethylphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



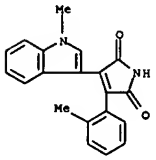
RN 125314-21-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3,5-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



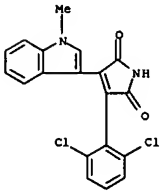
RN 125314-22-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2,3,6-trichlorophenyl)-(9CI) (CA INDEX NAME)



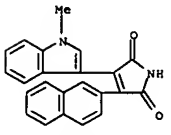
RN 125334-48-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2-methylphenyl)-(9CI) (CA INDEX NAME)



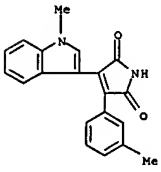
RN 125334-49-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,6-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



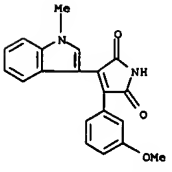
RN 137467-10-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2-naphthalenyl)-(9CI)



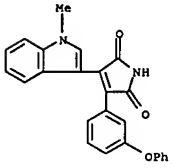
RN 137467-15-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(3-methylphenyl)-(9CI) (CA INDEX NAME)



RN 137467-16-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-methoxyphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



RN 137467-17-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(3-phenoxyphenyl)-(9CI) (CA INDEX NAME)



L6 ANSWER 57 OF 57 CAPLUS COPYRIGHT 2006 ACS on STN

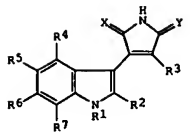
ACCESSION NUMBER: 1990:98378 CAPLUS
DOCUMENT NUMBER: 112:98378
TITLE: Preparation of 3-(3-indolyl)pyrrole-2,5-diones and analogs as protein kinase inhibitors
INVENTOR(S): Davis, Peter David; Hill, Christopher Huw; Lawton, Geoffrey
PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co. A.-G., Switz.
SOURCE: Eur. Pat. Appl., 38 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 328026	A1	19890816	EP 1989-102025	19890206
EP 328026	B1	19930428		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
ZA 8900865	A	19891025	ZA 1989-865	19890203
CZ 280738	B6	19960417	CZ 1989-752	19890203
SK 278989	B6	19980506	SK 1989-752	19890203
AU 8929658	A1	19890810	AU 1989-29658	19890206
AU 623630	B2	19920521		
HU 49348	A2	19890928	HU 1989-554	19890206
HU 201054	B	19900928		
US 5057614	A	19911015	US 1989-307104	19890206
AT 88704	E	19930515	AT 1989-102025	19890206
CA 1320194	A1	19930713	CA 1989-590178	19890206
ES 2054890	T3	19940816	ES 1989-102025	19890206
DK 8900558	A	19890811	DK 1989-558	19890207
DK 171891	B1	19970804		
JP 01233281	A2	19890919	JP 1989-27741	19890208
JP 07030071	B4	19950405		
NO 8900568	A	19890811	NO 1989-568	19890209
NO 172540	B	19930426		
NO 172540	C	19930804		
SU 1799382	A3	19930228	SU 1989-4613492	19890209
FI 8900652	A	19890811	FI 1989-652	19890210
FI 96861	B	19960531		
FI 96861	C	19960910		
US 36736	E	20000613	US 1998-14198	19980127

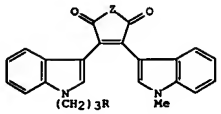
PRIORITY APPLN. INFO.:

GB 1988-3048	A	19880210
GB 1988-27565	A	19881125
EP 1989-102025	A	19890206
US 1989-307104	A5	19890206

GI



I

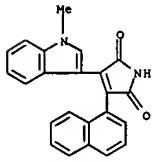


II

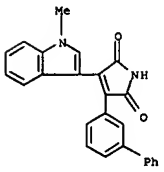
AB The title compds. (I; R1, R2 = H, alkyl, aryl, etc.; R3 = aryl, heteroaryl; R4-R7 = H, halo, alkyl, alkoxy, etc.; 1 of X, Y = O and the other = O, S, H and OH, H and H) were prepared Thus, 1-(3-bromopropyl)indole (preparation given) was stirred 2 h with (COCl)2 in CH2Cl2 and the product stirred 3 h with 1-methyl-3-indolylacetic acid in CH2Cl2 containing (Me2CH)2NEt to give bis(indolyl)furandione II (R = Br, Z = O) which was converted in 3 steps to II (R = NH2, Z = NH). The latter was stirred 16 h with 1,1'-thiocarbonyldiimidazole in THF to give II (R = NCS, Z = NH) which had IC50 of 0.008 μM for inhibition of protein kinase C in vitro.

IT **125313-42-0P 125313-43-1P 125313-57-7P**
125313-59-9P 125313-97-5P 125313-98-6P
125313-99-7P 125314-00-3P 125314-01-4P
125314-02-5P 125314-03-6P 125314-04-7P
125314-05-8P 125314-06-9P 125314-07-0P
125314-08-1P 125314-09-2P 125314-13-8P
125314-16-1P 125314-17-2P 125314-20-7P
125314-21-8P 125314-22-9P 125314-32-1P
125314-33-2P 125314-40-1P 125314-41-2P
125334-48-7P 125334-49-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as protein kinase inhibitor)

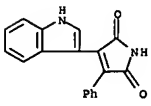
RN 125313-42-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(1-naphthalenyl)-(9CI) (CA INDEX NAME)



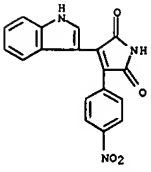
RN 125313-43-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1,1'-biphenyl]-3-yl-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



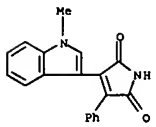
RN 125313-57-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



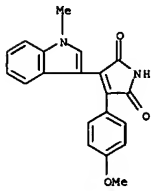
RN 125313-59-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1H-indol-3-yl)-4-(4-nitrophenyl)- (9CI) (CA INDEX NAME)



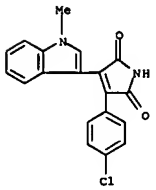
RN 125313-97-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-phenyl- (9CI) (CA INDEX NAME)



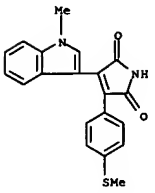
RN 125313-98-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-methoxyphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



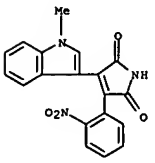
RN 125313-99-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



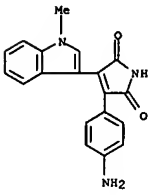
RN 125314-00-3 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[4-(methylthio)phenyl]-(9CI) (CA INDEX NAME)



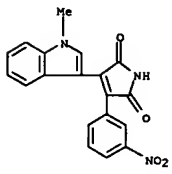
RN 125314-01-4 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2-nitrophenyl)- (9CI) (CA INDEX NAME)



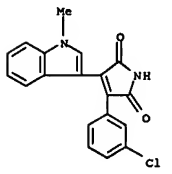
RN 125314-02-5 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(4-aminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



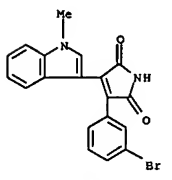
RN 125314-03-6 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(3-nitrophenyl)- (9CI) (CA INDEX NAME)



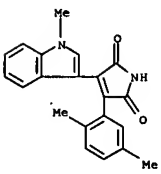
RN 125314-04-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



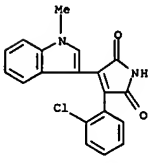
RN 125314-05-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-bromophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



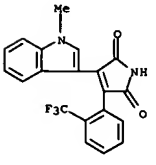
RN 125314-06-9 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,5-dimethylphenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



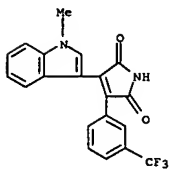
RN 125314-07-0 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2-chlorophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



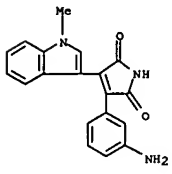
RN 125314-08-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[2-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



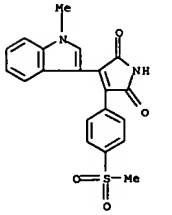
RN 125314-09-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[3-(trifluoromethyl)phenyl]- (9CI) (CA INDEX NAME)



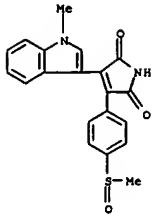
RN 125314-13-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3-aminophenyl)-4-(1-methyl-1H-indol-3-yl)- (9CI) (CA INDEX NAME)



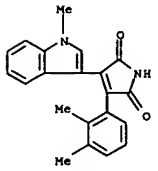
RN 125314-16-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[4-(methylsulfonyl)phenyl]- (9CI) (CA INDEX NAME)



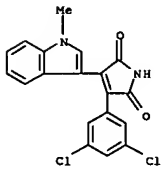
RN 125314-17-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-[4-(methylsulfinyl)phenyl]- (9CI) (CA INDEX NAME)



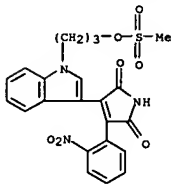
RN 125314-20-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,3-dimethylphenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



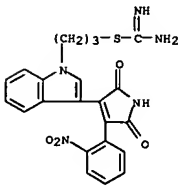
RN 125314-21-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(3,5-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



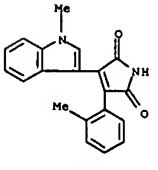
RN 125314-22-9 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-(1-methyl-1H-indol-3-yl)-4-(2,3,6-trichlorophenyl)-
(9CI) (CA INDEX NAME)



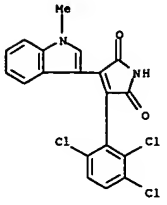
RN 125314-41-2 CAPLUS
CN Carbamimidothioic acid, 3-[3-[2,5-dihydro-4-(2-nitrophenyl)-2,5-dioxo-1H-pyrrol-3-yl)-1H-indol-1-yl]propyl ester (9CI) (CA INDEX NAME)



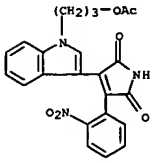
RN 125334-48-7 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(1-methyl-1H-indol-3-yl)-4-(2-methylphenyl)-(9CI)
(CA INDEX NAME)



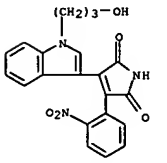
RN 125334-49-8 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-(2,6-dichlorophenyl)-4-(1-methyl-1H-indol-3-yl)-(9CI) (CA INDEX NAME)



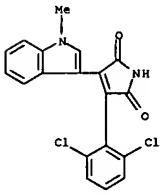
RN 125314-32-1 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-[3-(acetyloxy)propyl]-1H-indol-3-yl]-4-(2-nitrophenyl)- (9CI) (CA INDEX NAME)



RN 125314-33-2 CAPLUS
CN 1H-Pyrrole-2,5-dione, 3-[1-(3-hydroxypropyl)-1H-indol-3-yl]-4-(2-nitrophenyl)- (9CI) (CA INDEX NAME)



RN 125314-40-1 CAPLUS
CN 1H-Pyrrole-2,5-dione,
3-[1-[3-[(methylsulfonyl)oxy]propyl]-1H-indol-3-yl]-
4-(2-nitrophenyl)- (9CI) (CA INDEX NAME)



=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	292.19	601.20

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-42.75	-42.75

STN INTERNATIONAL LOGOFF AT 11:02:37 ON 27 FEB 2006